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Museums in the Present and Future

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The intelligent world has of late been passing through one of its cyclical phases. It would hardly be suspected that in these times the daily tale of news from home and abroad should be so wanting in human interest that it was necessary to seek for recondite subjects. Nevertheless astute editors or others on the staff of our daily newspapers have been constrained to discover that all is not well in our artistic atmosphere, and they call attention to the sad need of refinement in our surroundings, that our street architecture, though showing signs of grace, lacks coherence and taste, that our statues are deplorable, our public monuments wanting in dignity or design, and that, in fine, the necessity for organization and method is called for as much for our spiritual betterment as it is on the material side. A number of distinguished men, architects, painters, and critics of both, and of all else, have come forward, and their plans for a new and glorified earth have been placed before a grateful world.

I have no intention of following them through the involutions of argument and the condemnatory phrases brought to bear upon the conversion of the philistines. The handling of problems of art in these days leads the searcher through thorny paths, in which any but the thickest of skins may well be torn to shreds, and to handle them in the manner of the day demands apparently a phraseology all its own, really a special study in itself. The most competent and thoughtful student, therefore, might well hesitate before entering into a fray so confusing in its relations and

further befogged by the novelty and unintelligibility of the war-cries of the contending parties.

I am too timid to make any such attempt. But in common with others, doubtless, I have read the gospel of the various protagonists, and have found here and there morsels of good sense, and material for profitable reflection. Sir Aston Webb, in *The Times* of 22nd March last, agreed to a suggestion that the Royal Academy might call 'a meeting of representative men for the discussion of art in its direct relations to the public life'. Like many another suggestion couched in a well-arranged phrase, this has a heartening sound. But one cannot help wondering what exactly this scheme would mean when put into practice—who is to decide the question as to the men who are representative? And what, again, are they to represent? Is it the public eye and taste that they are to protect, or are they to be on the side of the artists, of any or all schools, and to dictate to the public what it ought to admire? We have long been familiar with the contention that artists alone are competent to judge of art; and that the productions of the old masters can only be safely entrusted to the care and judgement of new ones. The classic reply to this is not an unfair one—that your gourmet does not invite a cook to tell him whether the dinner is good, though he may reasonably ask him how it was produced. The atmosphere of our neighbours at the Royal Academy is not therefore necessarily the most bracing for the consideration of art in our everyday life. There is apt to be a suggestion of *parti pris*, and a narrowing of the very wide issues involved, which may reasonably include everything from the cut of our clothes to the design and situation of our cathedral churches.

The basic difficulty is, of course, that we come inevitably to the real question which will never be answered. What is good taste? That artists should be better equipped to answer it than another class is undoubted, inasmuch as they in their special fields have theoretically undergone a training in which questions of taste take no unimportant place. But, except in rare cases, the artist is more keenly interested and occupied with the technique of his profession and can spare but little time to arm himself at all points by the study of art as a whole. Even if he gives time to such studies it is by no means a certainty that he is, even then, possessed of good taste. However much individuals may disagree on particular cases, it is probable that it would be generally accepted that good taste may be in part innate, by inheritance or otherwise, in part it is the outcome of environment, and in a degree also it may be produced by direct training of the eye. In my judgement the effect of the first two would be likely to go deeper than the veneer

of exhortation. However that may be, if these premisses be approximately just, then there are no special reasons why an artist, such as a painter, should possess greater qualifications for the judgement of art in its direct relations to public life than are possessed by many a cultivated person with no power of graphic expression. There is the other side in this matter of taste. To produce, or to give a judgement upon, a work of art, any of the three processes set out above may be brought to bear, but certainly environment is a potent factor, and it is here where we as antiquaries may claim a voice. The term connotes of course a lengthened sojourn among, perhaps, people of good taste, but undoubtedly the involuntary refinement of the eye involves a surrounding of products of past times which by their passive qualities affect and enhance the intellectual standard of those living among them. This again is hardly open to question and leads to the conclusion that any one who is habitually confronted with the selected productions of the past may claim to possess an eye trained to distinguish good from bad with at least as much certainty as the painter, who deals probably with a much more limited field, and whose mind is inevitably occupied with technical points remote from questions of taste. For these reasons, among others, I claim that an antiquary experienced in discriminating minute differences of style in the productions of past times, has a right to call himself representative when questions of art in the everyday world are under discussion.

I have set down the position in general terms, but I am sure that my audience will readily apply my axioms to specific men of their acquaintance, some of them, it may be, in this room.

On one point sundry of our recent newspaper critics seemed to be agreed, in the verdict that there were to be no more museums. They fell into line here because the chief purpose of these institutions was to dissociate interesting objects from their natural and proper surroundings, rendering them dry, meaningless, and unprofitable, and the deduction seemed natural that museums were essentially a mistake. If this be the case, then it is clear that those already existing should be demolished. To stop their increase would be easy, but to destroy those in existence is a task presenting considerable difficulties and, in fact, I hardly suppose it will be attempted.

This rather drastic statement had the effect, however, of reviving in my mind the question that is no novelty to me, that is, how far museums did, in fact, justify their existence, and to what extent they repaid the nation for the vast annual outlay they entail. A complete answer to this question is not so easy as it

may seem. Our present conception of the utility and functions of a great museum is of recent growth. Even fifty years ago it was radically different, and it is not hard to see that in twenty years from now there will probably be an even greater change.

Museums in historically modern times owe their existence, first perhaps to the revival of interest in the arts of antiquity and the resulting birth of artistic methods, more or less imitative, based upon the classical style. Another side developed in the collection of rarities, natural and artificial, that formed the spoils of travellers or merchants to distant lands. From these two sources came into being all the little princely collections to be found in every great city of Europe. In very few cases, however, did any of these museums fulfil, or even aim at fulfilling, the purposes of a museum as we understand them to-day. They were rather in the main brought together to excite astonishment, like monstrosities at a fair, than as handmaidens to history or knowledge of the past, and were only occasionally used as incitements to the artists or craftsmen of the day.

Such a collection was that of Sir Hans Sloane, which, with those of the Harleys and Cottons, were the nucleus of the British Museum. Its history from its origin in 1753 is well known, and readily found. But in the beginning it could not make any higher claim than any of the princely museums of the Continent. It was in the main nothing but a collection of 'rarities'. Its emergence from that passive state was naturally a matter of time, and it is also rather a delicate question how far the change from a passive to an active condition was due to outside demands or to internal energy and far-sighted intelligence. But the transformation was not effected until well into the last century, and just about seventy years ago some departure was made from the old academic conditions that had hitherto governed the administration. It seems likely, on reviewing other events of this period, that this change was not an isolated incident, but was rather a result of a cultural wave that passed over the western world at this time. In 1851 came the Great Exhibition, and with it an all-pervading ferment in the art world. As on many occasions since, and no doubt many before, we were found to be a nation entirely deficient in taste and decadent in matters of art, with everything to learn. The wonders of art craftsmanship sent over by our continental neighbours were held up to our admiration, we were told to note their beauties and to use them for inspiration, and it was decided that never again was the English artist and craftsman to be in any respect second to those of any foreign competitors. England was safe. Not only was it to

contain examples of the best craftsmanship of the day, but also specimens of the worst, in order that the British workman might see not only what was to be applauded, but equally what was condemned, and the latter were shown apart in what was known as 'The Chamber of Horrors'. Something definite and concrete resulted. The Museum of Ornamental Art was installed at Marlborough House, and it was decided, in effect, that the millennium of art had arrived and that England was saved. Thus started the great museum of 'applied art' at South Kensington, now known as the Victoria and Albert Museum. Its specific function was to create a beneficial revolution in the craftsmanship of England, and to this end these masterpieces of modern work were acquired on generous lines from the great international exhibitions that followed the first at intervals of a decade or more. In addition to products of our own time, a large and important collection was made of works of art of the Renaissance and later periods. How far this expenditure of talent and energy went towards creating a new school of industrial art in this country, it is hard to say, and at any rate opinions differ widely; but, fascinating as the subject is, I hardly think this is the place to pursue it. What at any rate was assumed, and I fear on very insufficient grounds, was that as soon as examples of really good styles were generously provided and placed before the British manufacturer and artisan, nothing more would be seen of badly-designed and ill-conceived articles of daily use. From that day onward he would eschew evil and do only good. Nothing of the kind took place, and it was reluctantly admitted that a great deal more was needed than merely to fill galleries with fine chairs, tables, or candlesticks before the conservative Briton would mend his ways. Trade patterns and moulds that had served the British citizen for a generation or more held their own against the 'new art' of that day. The public was probably entirely satisfied, and the manufacturer very naturally hesitated before scrapping all his old models in deference to what he doubtless believed to be a passing whimsy of a limited class. What the buyer demanded the manufacturer provided, and each was content. Thus the first organized attempt in this country to bring art into the home was proved a failure. This failure, as represented by its final result, the present Victoria and Albert Museum, was in other ways a gigantic success, inasmuch as the contents of the Museum, though rejected by the craftsman, have become in course of time the most wonderful gathering of the art of recent centuries that has been systematically made in any country.

During these sixty years or more the British Museum pursued the even tenor of its natural development, meeting as far as possible the public demand for adequate representation of the many novel branches of science that sprang up during the last half of the century. Geology gradually merged into prehistoric archaeology, and collections from the French caves and the gravels of Abbeville were added. The study of prehistoric man naturally led to that of the stone-using races still existing, and ethnography became a study and a definite branch of science, and, except to those with minds stagnating in intellectual backwaters, was no longer regarded as something comic. India, her arts, religions, and antiquities, all of them surely deserving of substantive study, have always been treated as an Ishmael in our museums, though no doubt her religions have met with more serious treatment from the theological side. All these new and by no means simple lines of research were added one by one to the more ancient and academic list that was characteristic of the British Museum in its early days. It was not, however, a propagandist institution. It seemed ready to believe that salvation could equally be attained by other roads than those that led through its galleries. The aim would seem to be formulated in the statement, 'Here we have provided for the instruction of the public a conspectus, as complete as we can make it, of man's progress in the arts of life and in culture, from his first appearance on this earth up to your own times. Many of his productions have no claims to beauty, but every variety is needed to show how man progressed or retrogressed, during the ages he has lived on this earth.' This being said or done, the doors were kept open for such as cared to enter, and it must be said that much good resulted. But nothing in the nature of advertisement was attempted, and, of the two, the press was kept rather at a distance than welcomed.

There are other museums in London, but I have preferred to take these two as symbols, rather than to confuse the issue over a wider field. The one established and constituted for the unique purpose of collecting and fostering art and its products, and disregarding entirely historical association or mere antiquity; the other, at Bloomsbury, engaged in dealing with all man's productions, artistic or inartistic, but trying to illustrate his ascent from the earliest times to the present, by setting out in orderly array, all that research could furnish to bear upon so complex a subject. How far these two treasure-houses of art and history have served to obfuscate the public mind by collecting hundreds of objects and showing them in serried ranks away

from their natural surroundings, is not a question that I, of all people, can be expected to answer without bias. The natural habitat of a watch is, I presume, in the pocket of its owner, but if the watch in question no longer serves its purpose of indicating the hour owing to a long life of three hundred years, it would seem to me not a crime, but the reverse, to place the instrument where its artistic and technical qualities can be appreciated. To take a much more debated instance. The frieze of the Parthenon now lines the walls of the Elgin Room at the British Museum, at about the height of the spectator. In the temple itself it was some sixty feet above the head of the visitor, and, as I know by experience, it was quite out of the question to obtain any clear view of it without mounting to its level. The barbarity of its removal has therefore brought some compensation, and though, in the opinion of those who aspire to lead the artistic opinion of the newer school, it belongs to a negligible period of art, yet I fancy it will continue to please the senses of a large number of persons who are content to be labelled as old-fashioned.

As I reminded you, the British Museum was founded in 1753, while the Victoria and Albert Museum was the child of the exhibition of 1851, as indeed can still be seen in the spacious 'courts' with slender iron supports and galleries that inevitably suggest a palm-house. During the life of the Victoria and Albert Museum more museums have been built over the whole world, in Europe and North and South America especially, than were built during the whole history of the world up to that time. Some few of these (and here I would confine myself to the nineteenth century) have been built on plans well and carefully thought out, and by men having in view the specific purpose to which the building is to be applied. In the case of the museum at Boston, Massachusetts, a commission, consisting of members of the Committee and an architect, spent months in Europe to examine the existing museums and to discover, from the defects and advantages of each, what conditions would best suit the site at Boston. They went even further, and erected a temporary building on the proposed site and studied the effect of various methods of lighting over the course of a year. This is now a good many years ago, and, as I have stated it, such preliminary investigations might seem prompted by the most ordinary common sense. At that time no museum building had been recently erected, and even if there had been one in existence, the conditions of light and climate might not have been the same as those prevailing in New England. But, however that may be, the Boston Museum was no haphazard affair. It was built from

designs conceived and thought out by men of practical knowledge of what they wanted. In my judgement the result is excellent in the main, though I believe that this opinion is not universally held. The point on which I wish to lay emphasis, however, is not whether these elaborate precautions were successful, but that so much preliminary thought was given to the matter, and by practical business men who gave their minds to museum planning and arrangement in conjunction with an architect who could supply the technical knowledge. It may seem odd to insist so strongly upon what may seem to be so commonplace. For do we not know that if a hospital or laboratory—or even a warehouse—is to be erected in this country or elsewhere, the plans are necessarily submitted in the first case to the medical staff, in the second to the chemist, or thirdly to the merchant, and that they and the architect together decide on what shall be erected ? Surely as much, and even more, is demanded for a museum. But in this case nothing of the kind happens. I know of no instance in the last century where anything like deliberate consultation has taken place between the architect charged with the construction of the building and the officers of the museum whose business it is to utilize it. It is not easy to discover the reason for ignoring so obvious a collaboration, and in fact, there is probably no reason but the negative one that a museum is not with us regarded officially as a scientific undertaking, where the means should be made to subserve the end. It would seem that the only factor taken into consideration is conceivably the cubic capacity of the building in relation to the mass of the collections to be exhibited. No thought would appear to be given to the collections as a direct means of education, or care taken that the planning of the galleries, and the resulting arrangement of the contents, have an obvious bearing on the functions of the institution.

The national museum of Wales, still in process of construction, is a notable exception to the practice of the preceding century, and I take pleasure in recording that here perhaps is found a promise of better things in the future.

My strictures on the museums of the nineteenth century would seem to be a criticism of the architects, but indeed that is not the case, except to a very limited extent. The architect is given a site and is told, in effect, that a museum is wanted on that spot, and he proceeds to design one. He cannot know enough without elaborate detailed information from those who are going to fill the building with works of art, to make his plans accord with the contents and their arrangement, and no museum exists in this country that can help him with ideal conditions. The result in

every case must necessarily be an experiment, based upon lamentably inadequate data. We have two buildings in London which are all too complete as illustrations of this statement, the Victoria and Albert Museum at South Kensington and the northern annex of the British Museum. The architects are both friends of my own, and I know, in the one case, that the architect is guiltless in the respect I am emphasizing, and I feel certain, though I cannot say that I know, that the other is equally innocent. It is the system that is wrong, and until the principle is admitted that the contents of a museum take precedence of the building that contains them, no advance is possible in museum planning. I do not propose on this occasion to go into the details that have led me to this conclusion with regard to these two important public buildings. The list would be too long ; my present desire is to call attention to what has happened in the immediate past in order to avoid such deplorable and costly mistakes in the future. And, finally, to state with all the emphasis that I possess that success will never be achieved until the architect works in the most intimate understanding with those who have to use the building when he has finished it. No building, however beautiful it may seem to the passer-by, can be held to be anything but a failure unless it serves the purpose for which it was built.

Whether it be the case that we have too many museums or the contrary, there is one aspect of the greater ones that will become a matter for urgent consideration before long. It may also concern some of the smaller, and indeed may be causing anxious thought among them. I have in mind the fact that all London museums are by their situation and surroundings restricted in the possibility of expansion. The British Museum is a square block in the very centre of the town, possessing space for new galleries of some size on the eastern and western sides, but no more. The Victoria and Albert Museum also fills the site on which it stands. Of the smaller institutions, the Guildhall Museum, always crying for more space, would seem to have already reached its extreme limits. Experience shows clearly that if a museum is to remain alive, it must inevitably increase the number of its contents, and a time comes when the groaning walls cry out that they can hold no more. Here, then, we have a problem that is by no means so remote as might be thought. In the not distant past the trustees of the British Museum solved the problem of space at Bloomsbury by transferring all the natural history collections to a new building three miles away. There, however, they had a clear-cut and logical division—separating the works of man from those of nature. In the matter of the depository for newspapers at Hendon, sheer

necessity rather than logic dictated the measure. But further partition must inevitably come, and it seems to me clear that the library is the next section to fall away from the parent. Here, as with the natural history, the division would be both logical and practical. All the other departments of the museum are so intimately connected that they could not be separated without seriously damaging both those taken and those left. As I said before, they form a complete picture of man's culture from the beginning of time. Books are of course included also, but a public library is in its essence a very different thing from a great museum, and in every country but England receives different treatment. Here we have, *eo nomine*, no national library—the term 'British Museum' effectually masks it, and no hint is given to the casual stranger looking at the building or reading its notices, that it is the shrine of the national library. An innocent inquirer receiving an official notification from its administration might reasonably wonder why its governing officer should be entitled 'Principal Librarian', even if he were aware that one of its sections bore the title of 'Printed Books'.

We in London, and in England generally, are so accustomed to the present scheme, and the Reading Room is so familiar a feature of the museum, that it never occurs to us that we are living under unusual and archaic conditions when we bury our national library in our national museum and never mention it by name, or include it in a directory.

In this particular respect France is more logical, and with great advantage. At the same time the palace of the Louvre, considered as a museum, obviously leaves much to desire, in spite of, and partly because of, its occasional magnificence. The halls and galleries of a museum should please by their proportions, in other words, by their appropriateness, not by the gorgeous character of their decoration.

I hardly suppose that any one will question the propriety or the practical utility of this country possessing a national library; but it is only the few who realize that the working of the Copyright Act alone will in time turn what may now be an ideal into a necessity. The library, like every other section of the museum, is straining at its bonds, and must within a small number of decades, burst them to attain freedom and live its life usefully. For this reason alone, and there are others, it appeared to me that it would have been prudent to take steps to secure the still vacant land on the north of the present building as the site of the national library. The advantages need not be pointed out, and I see no insuperable difficulties in adapting the land to the purpose.

A public library can be as well ten stories high as five, and in this it differs essentially from a museum, all parts of which should be accessible to the public. However suitable this site would be for London University, it would without question be better fitted for the national library. I can see now the completed building as I imagine it. Facing the northern façade of the museum would be a building somewhat less in height, with a tower of any reasonable height at either end ; each block would have a courtyard in the middle, and a similar tower at each corner, while the four blocks would be connected over the smaller streets by arched bridges. The existing traffic need not be in any way diminished, for a triple arch might be made the principal feature in the southern front which would cross Museum Avenue and face the present museum building.

The probability of this scheme being even considered is not, however, great, and the present congestion of all parts of the existing museum will be forced to find relief in some other direction. Many years ago I discussed this question, at that time a remote one, with Mr. Spring Rice of the Treasury, and the suggestion I then made is still worth consideration. It had its origin in the double purpose served by a great public museum. First, the obvious one that the contents are methodically set out in an attractive manner in order that the ordinary taxpayer may see his possessions and derive edification and amusement from them ; and the second and really important purpose of the collections, that they should be of use to scientific and historical scholars in their studies. Both of these must be kept constantly in mind by the persons in charge. My idea was to diminish greatly the exhibited portions, withdrawing numbers of objects now shown, without any real loss to the ordinary visitor, but to the great gain of the serious student. The objects thus withdrawn would be kept as a reserve series in workrooms where they would be available to the student in exactly the same way as books are now given out to him in a library. One beneficial result would be that increases in the collections would be accommodated at infinitely less cost than is now possible, where each year demands additional exhibition cases, now more than ever a costly affair.

To put such a scheme into practice would not, however, be so simple as it seems, if the scene of the experiment were to be one of our great museums. In the first place none of the buildings has either adequate storerooms of the necessary type, nor has any one the equally essential students' rooms. For a necessary condition of the scheme is that the exhibited and the reserve collections should be in close proximity to each other, in order that the two can be

treated as a unit, as of course they are in reality and in actual working. This plan is in actual operation in Boston, where, if I remember rightly, the reserve collections and students' rooms are immediately beneath the corresponding exhibition galleries.

The reserve collections would of necessity be systematically arranged, in much the same way as the books in a library, and available for the inquirer on demand, and he would require comfortable and well-lighted quarters in which to study the articles so handed to him. These provisions do not exist anywhere in our greater museums, and certainly could not be made in all of them. A further change, though not in itself presenting any special difficulties, must not be overlooked. At present the student, as well as the casual visitor, can see for himself the extent of a particular series, when the whole is shown. If a large part be withdrawn from the public galleries, he will demand that catalogues should be printed more generously than at present, in order that he may know what hidden material is at his command. This will give additional occupation to the higher staff, who, on the other hand, will enjoy greater freedom from the greater simplicity of dealing with accessions. The duties of other branches of the staff will also change, and the method of placing the bulk of the collections before the student public will again more nearly resemble that to be found in a library. Each specimen will be pressmarked, in the same way as a book, and the student will formulate his demand for it in a similar manner.

If some such scheme as that here outlined can be adopted at the British Museum, then, with the additional space in reserve that is now represented by the private houses east and west of the museum rectangle, the building will be able to hold its contents for some time yet. But in course of years the inevitable moment will come when the library must go, and the difficult question of its site will then be a problem not easy of solution. But it will not be our problem.

On the other hand influences are at work which will in the future tend to diminish the flow of treasures into our great museums. Some of these influences I hold to be sinister, inasmuch as if they are allowed full play, they will retard the progress of knowledge in a pernicious way and to a degree unknown. In my Address to this Society last year I alluded to the regulations that threatened to crystallize in India, under which it is, or would be, illegal to export from India any ancient remains for the enrichment of other countries or museums, even the British Museum. I am fairly sure that this idea did not originate with any native of

that country, who was probably ignorant or careless of any such grievance until it was pointed out by some ingenious official. People of all nationalities are usually well aware of the value of a grievance, for once in the possession of a good sound one they are in a position to exchange it for something of far greater value for which they really have a desire.

India does not by any means stand alone in this respect, nor is it the only part of the world that places an embargo on the export of its antiquities or makes regulations which have the same effect. To go no further than this city of London, we have here no less than three special museums devoted to the preservation of all concerned with her past: first, the London Museum; second, the Guildhall Museum, specially for the City, no doubt; and thirdly, the County Council Museum, which is destined to embrace what is called Greater London. In a sale by auction where relics from London are included, it is a common thing for me to be requested to stand aside in favour of one or another of these museums. This sometimes results in some objects being lost both to the London museums and the British Museum. To go further afield, the same principle is applied right and left; all great cities, and some of the lesser ones, are apt to demand similar concessions, especially where the museums have energetic curators.

A continental archaeologist coming to our islands to study their antiquities, would almost certainly proceed first to the British Museum, and would expect with the same certainty to find within it a complete representation of the archaeology of the British islands. What he finds in reality is something very different. He discovers that the British Museum is debarred from acquiring, apparently either by purchase or gift, a single object of antiquity from any part of the islands except England itself, and the latter only by the grace of some indulgent local museum. When, in view of this very odd situation, one glances at the countries that have possessed an ancient civilization in either hemisphere, the condition of the unfortunate student in the future is really very sad. Greece and Italy, and other countries in Europe, specifically ban the export of antiquities. The same may be said of a number of the states in South America, and in Mexico I believe the ban exists, though perhaps somewhat neglected at present. Thus from none of these countries can a general museum of archaeology expect to obtain relics of their past history, and the functions of such an institution will diminish in extent and utility year by year until they ultimately cease to act. The unlucky student of ancient art will be forced to travel from Athens to Rome, to Crete, Copenhagen, Stockholm, Pekin, to Japan, Guatemala, Mexico, and the ends of

the earth before he can obtain a general view such as in a central museum would involve a journey perhaps of a couple of miles.

This is probably extreme as a statement of what will actually occur in the near future, for in matters of this kind human nature largely enters. And no experience is more common than to find that human nature is impatient and scornful of laws which are repugnant to common sense. The laws will be evaded, smuggling will increase, the morals of the merchants will be correspondingly lowered, and 'prohibition' in works of art will be a mark for the scoffer, as it is now in other directions.

The demand for knowledge and for intellectual possessions, whether they be owned by persons or by corporations, will never subject itself to myopic parochial laws. It is only in countries like our own where such curtailment of personal liberty can ever flourish. It is hard to conceive of a state of things more contrary to every principle of equity than that which prevails between the museums of England and Scotland, and for that matter Ireland too. The claim made for the national Scottish museum is that it has a vested right to everything Scottish, and in addition may secure anything else that it can get. That was the principle laid down by its late director, Dr. Joseph Anderson, a distinguished antiquary, and probably a man of wide views on other subjects. Yet he seriously maintained that nothing that could claim a Scottish origin should ever leave the country. At the same time he admitted that the finest stone hammer ever found in Wales formed part of the Edinburgh collection, as an 'illustration', though he confessed that no Scottish implement had ever been found that at all resembled it. It is hard to believe that any one who had given serious attention to the intricate problems of the history of culture should take up a position so one-sided and so childish. The English are called insular, but it is seldom that they carry insularity to such lengths as this. Nor is it even a question of relics of any rarity. In one case that I have in mind ancient remains by thousands are piled in drawers, and studied practically by nobody, and yet not a single specimen can be spared for comparison with the many similar remains in other museums and from other countries. The situation can only be paralleled by comparing it with the views of the wildest of Zionists. They appear to claim that they are to be entitled to preserve every privilege that belongs to their race or religion, such privilege being safeguarded at every turn by the power and wealth of the British people, who on their side are to gain no advantage whatever. But as soon as something is demanded of the Zionist of this type he pleads poverty or incapacity, and gives nothing. Not only is

humanity outraged by so unjust a system, but the increase of knowledge is stopped. The comparative method is the very essence of archaeology and this childish parochialism strikes at its very roots. Unfortunately museum interests count for nothing as soon as politics are brought to bear, and there can be no question that even in matters intimately concerning the welfare and custody of our national antiquities, politics and political considerations take a prominent place. Governments, of course, have neither soul nor conscience on any such question, and where, as commonly happens, there is but little real public opinion, a single noisy member of Parliament, by threats, may readily turn a ministry in any direction that pleases him. For it need hardly be pointed out, museums in general have no effective advocate in Parliament.

There is no insuperable difficulty in reconciling the claims of a great central institution as against those of smaller ones. A full and complete representation of the local history and of the flora and fauna of the district or county is, of course, a first duty for a county museum. But there are limits, even here, and to amass objects by thousands whether it be birds' eggs or flint arrow-heads, when a few score or a few hundreds would amply serve the purpose of the student, is to misuse the space at command, and to confuse rather than to instruct. It betokens the type of mind of the maniac coin-collector, who having a coin hitherto unique, carefully destroys the second example that comes into his hands. The purpose of each is not to use what he collects, but to prevent any other person possessing it. Here again human nature enters, but not of the kind that helps to foster knowledge, or with a tendency to large views. The central museum wants only a very small proportion of the specimens from any given district, its purpose being, not to illustrate the peculiarities of any given spot, but rather to use the objects in a comparative or evolutionary series, and thus to demonstrate the existence of trade-routes or cultural connexion on the one side, or on the other the growth of specific types of objects, and by these means to settle their chronological sequence. It is hardly necessary to elaborate these points here. They are, in fact, commonplaces. But commonplaces, like common sense, are not always recognized, and my present point is that self-evident facts, while gaining acceptance as general statements, are treated in a very different manner when they become specific instances.

One can only hope that with the spread of knowledge and the increase of general intelligence, it will be found that it is, if not more blessed, at least as blessed to give as to receive, and

that not only the progress of science, but the harmony and charm of life, are increased thereby.

Much of the foregoing may seem a mere futile cry in the wilderness, and some may demand that he who complains should point out a remedy. To the first I would reply that men before now have gained merit by being apostles of the obvious, and that good may be done by a bare statement of self-evident facts. So that what I have set down here may by chance not altogether miss its mark.

As to the second, I confess frankly that a simple and direct remedy is hard to find. It may in some quarters be thought that if we set up in this country a Ministry of Fine Arts, as in France, we should at once put an end to any overlapping or possible disagreements in all our artistic and similar institutions. From my experience of the working of the French system, I do not think that such a result would by any means follow. I have, moreover, a strong suspicion that after a few years of the rule of such a ministry here, those chiefly concerned would find that they had exchanged the control of King Log for that of King Stork, in the manner of Aesop's frogs. In fact, I do not believe that there is any royal road or government road by which the desired goal can be reached.

Until the heart and the intelligence of the people at large can be touched in such matters, until they attain to the stage of realizing the great material advantage to them and their children of an understanding of the value of art in daily life, there is but little hope of any general progress in refinement.

The omens are assuredly not in our favour at this moment, but I am confident that this phase will pass, and with a world at rest the minds of men will turn with a sense of relief to the forgotten or unknown pleasures to be found in the glory of a beautiful universe, and will crown it with still greater beauty.

Wayland's Smithy, Berkshire

By C. R. Peers, Secretary, and Reginald A. Smith, F.S.A.

[Read 16th December 1920]

I. The History of the Monument

In Northern mythology Wayland the Smith corresponds to the Roman Vulcan or the Greek Hephaestus; and his name cannot have been attached to the well-known group of sarsen slabs in Berkshire till the Teutonic invaders reached the upper Thames in the fifth century. This cunning worker in metals appears on the Franks casket in the British Museum, dating from soon after 700; and the monument is mentioned under the name of Wayland's Smithy in a charter of King Eadred to Aelfheh dated 955.

The site is two miles from the western boundary of the county, one mile east of the village of Ashbury, and the same distance south-west of the White Horse near Uffington. It is now encircled by beech-trees near the brink of the downs, about 700 ft. above the sea; and 220 ft. to the south runs the prehistoric track known as the Ridgeway. The legend connected with the stones is well known and has been discussed by Thomas Wright in *Archaeologia*, xxxii (1847), 315, and *Journ. Brit. Arch. Assoc.*, xvi, 50; also by Dr. Thurnam in *Wilts. Arch. Mag.*, vii, 321.

Mention may also be made of Oehlenschlager's treatment in *Wayland Smith*, from the French of G. B. Depping and F. Michel, with additions by S. W. Singer, published in 1847; but the tradition has been kept alive above all by Sir Walter Scott, who gave a garbled version of it in *Kenilworth*. That the novelist never visited the monument but derived his information in London from Madam Hughes, the wife of the Uffington vicar (who was also canon of St. Paul's) and grandmother of Tom Hughes (the author of *Tom Brown's Schooldays*), has been established by the researches of Mr. H. G. W. d'Almaine, town clerk of Abingdon, to whose zeal and pertinacity the recent exploration of the site was chiefly due. The Smithy has for years been scheduled as an ancient monument, and the Earl of Craven, as owner, not only

readily gave permission but generously provided the labour for the excavations, which were carried out under our own supervision in July 1919 and June 1920. Subscriptions towards incidental expenses were thankfully received from the Berkshire Archaeological Society and its honorary secretary, Rev. P. H. Ditchfield, F.S.A.; also from Rev. E. H. Goddard, honorary secretary of the Wiltshire Archaeological Society, and from our own Society. Mr. d'Almaine not only took an active part in the arrangements, but made two models; and Rev. Charles Overy of Radley College burdened himself with apparatus, and undertook with success most of the measuring and photography. Subsequently, the human bones discovered were skilfully repaired and fully described by Mr. Dudley Buxton, of the Oxford Anatomical Museum. Lord Craven's agent, Mr. Beresford Heaton, did us great service, and his local representative, Mr. McIver, loyally carried out his instructions to the advantage of the party and the venerable site itself. To all these gentlemen we hasten to convey our thanks, and regret that three beech trees within the enclosure had to be felled, as their roots were interfering with the stones of the chamber.

The earliest illustration known or likely to be found is a rough sketch by John Aubrey about 1670 (fig. 1), reproduced in *Wilts. Arch. Mag.*, vii (1862), 323 from his *Monumenta Britannica* in the Bodleian library. The chamber and surrounding stones are evidently not on the same scale, but the outline and measurements of the barrow (about 203 ft. by 66 ft.) are approximately correct. The standing stones on the south-east border of the mound are still in position, but most of the others shown as above ground have disappeared; and our excavations have brought to light several that had fallen and been covered up before his time. It may be possible eventually to disclose the stones now lying concealed in his gaps. The chamber is very summarily drawn, Aubrey perhaps starting the notion that the eastern transept was a cave; and it is curious that most of the illustrations and accounts of the monument published since his time have perpetuated the error, as for instance Chambers's *Book of Days*, July 18, vol. ii, 83 (published in 1888).

The next publication is dated 1738, and took the form of a letter to Dr. Mead concerning some antiquities in Berkshire, by Francis Wise. His plate opposite p. 20 shows the entire barrow with rather angular outline, highest at the south end and irregularly covered with stones, among which the chamber can be barely identified. There is also a nearer view, taken from the west, and showing the earlier approach from that side, whereas the path from the Ridgeway now leads to the *south* end of the monument.

Fig. 1. Aubrey's Sketch of Wayland's Smithy, about 1670.

The stones are woefully out of drawing, but roughly represent the present arrangement at the southern end of the barrow.

His distant view is reproduced in *The Mirror of Literature, Amusement, and Instruction*, vol. xxi (1833), p. 88, this and another reference to vol. viii (1826), p. 33 having been furnished by Dr. Eric Gardner, F.S.A. The later view represents the 'Cave' surrounded by fir-trees, with water in the foreground (perhaps in the fosse), and a separate stone on either hand (on the west of the chamber). In the interval of nearly ninety years a belt of fir-trees had grown up round the barrow ; and Thurnam states that firs and beeches were planted about 1810, the former being dead in 1860. No trees are included in Lysons's plate published in 1806 (description in *Magna Britannia*, i, 215 of the 1813 edition).

Sir Richard Colt Hoare wrote of the monument in 1821 (*Ancient Wilts.*, ii, 47):—'It was one of those long barrows, which we meet with occasionally, having a kistvaen of stones within it, to protect the place of interment. Four large stones of a superior size and height to the rest, were placed before the entrance to the adit, two on each side ; these now lie prostrate on the ground : one of these measures ten and another eleven feet in height ; they are rude and unhewn, like those at Abury. A line of stones, though of much smaller proportions, encircled the head of the barrow, of which I noticed four standing in their original position ; the corresponding four on the opposite side have been displaced. The stones which formed the adit or avenue still remain, as well as the large incumbent stone which covered the kistvaen, and which measures ten feet by nine.' He notices the north and south axis of the barrow as exceptional, but somewhat perversely states that 'the kistvaen is placed towards the east', not realizing that the whole of the chamber was originally roofed with capstones like that of the eastern transept. It was, however, recognized a hundred years ago that the sarsens once formed the chamber of a long barrow and that the entrance was flanked by two pairs of enormous stones now fallen.

The first careful drawings of the Smithy were published in *Archaeologia*, xxxii (1847), 312, pl. xvii. They were the work of C. W. Edmonds and illustrated a paper on the monument by a former secretary of the Society, John Yonge Akerman. The chief merit of this paper is its recognition of the cruciform plan, but in this he was anticipated by Stukeley who died in 1765 (Surtees Society's vol. lxxvi, 8).

A pointed contrast in method may be seen in *Wilts. Arch. Mag.*, vii (1862), which contains an account and drawing of the monu-

ment, both bristling with inaccuracies (p. 315), followed by a sober account from the pen of Dr. Thurnam (p. 321). The latter gives as much information as was possible without systematic excavation, and is fully worthy of one of the greatest names in British archaeology. References to the literature of the subject are given in his note on p. 330.

At the International Congress of Prehistoric Archaeology at Norwich and London in 1868, the late Mr. A. L. Lewis read a paper 'on certain Druidic monuments in Berkshire' (*Report*, pp. 38, 44). He accepted the cruciform plan of the Smithy and thought the gallery had been cut into two chambers by two of the wall stones being set crosswise. In his opinion the monument was intended for use as a tomb, not as an altar, and the mound that probably covered the supporting stones (leaving the capstones exposed) would not have contained much material. His plate gives a plan of the stones surrounded by trees, and he refers to the abundance of sarsen stones at Ashdown, two miles to the south, which are said to have been still more numerous before the house was built (Ashmole, *Antiquities of Berks.*, ii, 198).

The chambered long barrows of England may be said to agree in type, but each has its peculiarities, and Wayland's Smithy has more than usual. Thurnam states in his paper on Long Barrows (*Archaeologia*, xlii, 205) that two out of three, perhaps four out of five, have their long axes approximately east and west: the rest are about north and south, and both Nympsfield near Dursley, Gloucestershire and Nempnet in Somerset, nine miles SSW. of Bristol, like Wayland, have their chamber at the south end. His plate xiv is useful as showing side by side the plans of several such chambers, but no true parallel for the simple cruciform arrangement of the stones is there given. Borlase (*Dolmens of Ireland*, ii, 457–8) saw a resemblance to the long barrow at West Kennet, Wilts., which had squarish ends (*Archaeologia*, xxxviii, 409) and a stone enclosure, according to Aubrey's drawing of 1665. The dimensions in this case were 336 ft. by 75 ft., the narrow end being 40 ft. across.

In the *Archaeological Review*, ii (1889), 314, Sir Arthur Evans compared Wayland's Smithy with one of the monuments at Moytura, co. Sligo, of which a view and plan are given in Fergusson's *Rude Stone Monuments*, pp. 182, 183. The lower limb of the cross is imperfect, but there were evidently two rings round the chamber, the inner being of small stones; and the opening in the outer, opposite the base of the cross, is flanked by two stones that may be door jambs or the rudiments of an avenue, or (as Fergusson preferred) an external interment. The diameter

of the outer circle is 60 ft.; the monument is no. 27 in Petrie's list.

A good foreign example of a chamber with massive jambs at the entrance was excavated by Gustafson in 1887 in Bohuslen and illustrated in his *Norges Oldtid*, p. 33, fig. 113 and p. 38, figs. 132, 133. English examples are not so definite, but Thurnam speaks of 'the two large stones which in the best marked examples of these chambers form the door-jambs to the entrance', and gives some references in *Archaeologia*, xlii, 222, note *b*.

The four prostrate slabs at the south end of the barrow proved, when completely laid bare, of imposing dimensions; and an east and west trench was dug to discover their original purpose. Not only were the sockets made for them in the chalk discovered with small lumps of sarsen to act as wedges at their feet, but on the northern edge of the trench, opposite the foot of the slab imme-

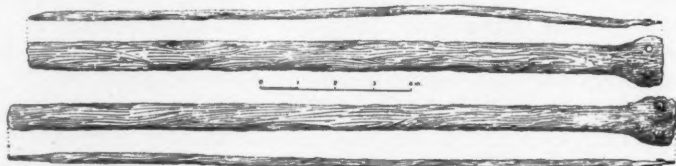


FIG. 2. Two iron currency-bars from Wayland's Smithy.

diately west of the entrance, two flat rods of iron were taken out together (fig. 2). They were lying parallel to the foot of the jamb, 1 ft. from the present surface, and looked like door-hinges, but the only perforations are in the expanded end of each, and another interpretation was needed. Though a novel variety of the type, they are evidently currency-bars of Early British origin, such as Julius Caesar described (*Bell. Gall.* v. 12), and no doubt saw during his invasions in B.C. 55–54. Apart from the expanded end the section is oblong and quite normal, the longer weighing when found 11¾ oz. and the shorter just over 12½ oz. After cleaning and treatment to prevent further rust by Dr. Alexander Scott, F.R.S., at the British Museum, the weights are respectively 11 oz. 30 grains and 12 oz. 20 grains. The standard based on independent evidence is 11 oz. (4,770 grains = 309 grammes). Several papers have been published on the subject (*Proc. Soc. Ant.*, xx, 179, xxii, 338, xxvii, 69; *Archaeological Journal*, lxix, 424; and *Classical Review*, 1905, 206).

The discovery of currency on such a site inevitably leads to speculation. According to the legend, a traveller whose horse had cast a shoe on the adjacent Ridgeway had only to leave a

groat on the capstone, and return to find his horse shod and the money no longer there. But the invisible smith may have been in possession centuries before the Saxons recognized him as Wayland, and the ancient Britons of Caesar's time may have been in the habit of offering money here either in return for farrier's work or merely as a votive offering to the local god or hero. In Sicily a similar tradition can perhaps be traced back to the classical period (*Archaeologia*, xxxii, 324).

Whatever the motive, we have to explain how the currency-bars came to be buried at that particular spot, which was on the inner side of the enormous jamb and not accessible, even from the passage, when the mound was in existence. As matters now are, there is no reason why treasure should have been buried there rather than inside the chamber; but a votive offering deposited at the base of the largest standing stone would have been most appropriate, and the suggestion is that one of the jambs at least was standing about 2,000 years ago. On that theory we must also presume that the surface was then much as it is now, else the position would have been unapproachable without a deep excavation. In other words, the find of currency-bars not only points to a British predecessor of Wayland, but indicates that although this particular jamb was still standing, the long barrow had been already denuded to its present level in the first century before Christ.

Except for two capstones to cover part of the lower limb of the cross, all the stones of the chamber are accounted for. Though there is nothing to show when the capstones were displaced, it is probable that much of the damage was done on one occasion, possibly without the intervention of man. The capstone of the crossing was on a higher level than the rest, and probably was the only one visible on the original surface of the barrow. This huge slab has fallen and sunk into the ground on the north-east of the chamber. In its fall it also disturbed its neighbours, forcing the capstone of the northern arm between the eastern upright of that chamber and the northern upright of the eastern transept. In sliding down to the north-east it also tilted towards the south the northern upright of the northern limb of the cross, and depressed the north-west angle of the vast capstone that still covers the eastern transept. The weight of the central capstone is estimated at 1½ tons, that still in position being about 3½ tons. The capstone of the western transept has slipped off to the north, where it now lies, and the last capstone to the south has fallen and partly closed up the entrance to the chamber, its dimensions being 3 ft. 9 in. by 3 ft. 8 in.

It should be noted also that the capstone of the northern arm of the cross originally rested on top of the north and east uprights, but on a ledge cut on the inner face of the western upright, 9 in. from the top, on a level with the top of the others. The northern capstone was thus accommodated under the projecting edge of the large central capstone, to which it gave additional support. On the inner face of the south-east pier of what may be called the central tower were observed four circular depressions that might rank as 'cup-markings', but in any case they are not good examples, nor can their date be determined in relation to the chamber.

Wayland's Smithy may thus be said to have a history, certainly more than the later and more celebrated Stonehenge ; and recent excavations have added largely to our knowledge of both monuments. Wayland, however, still retains some of his secrets ; and if and when the omens are favourable, more may be done to lift the veil. For the present all concerned have done their best to answer King Alfred's question in his free translation of the *Consolations* of Boethius :

Ubi nunc fidelis ossa Fabricii manent?
quid Brutus, aut rigidus Cato?

'Where are now the bones of the celebrated and wise goldsmith Weland? Where are now the bones of Weland, or who knows now where they were?'

In the report on the human remains by Mr. Dudley Buxton, detailed measurements are recorded that need not be published in full. As will be seen later, nearly all the interior of the chamber had been previously dug over, but the lower levels of the western transept still contained some human bones in groups, though not in anatomical order. Here, as elsewhere, skeletons had been disturbed to make room for other burials, and it is probable that the dead were first buried outside and after a time disinterred, for the bones to be laid in the tomb reserved no doubt for the greatest of their time.

Here we found remains of perhaps eight skeletons, including one of a child, but their incompleteness points to a previous disturbance perhaps in neolithic times. The absence of thigh-bones in this case is remarkable, and only a few conclusions can be drawn. The best preserved skull belonged to an adult of middle age, probably male, with a cephalic index of 78·19, the mean indices of long and round barrow subjects being 74·93 and 76·70 respectively. It is therefore broader in proportion than the average brachycephalic Bronze Age skull, and may belong to an

intrusive burial after the introduction of metal. In Mr. Buxton's opinion the people buried in Wayland's Smithy did not differ to any great extent in physique from the more recent inhabitants of Berkshire. Certain differences from modern bones, due to habit, are striking, namely the pressure facets which may be all attributed to squatting, and the wear of the teeth, both of which are characteristics shared by primitive man and by modern savages.

Near the middle of the western skirt of the barrow, 3 ft. outside the line of standing stones and on the line of our trench BB, was found a skeleton buried in a crouched position, and lying on its right side, with the head to the north. It was only 18 in. below the surface, and had been partly destroyed, probably in digging for rabbits. It is pronounced to be that of a man of about 5 ft. 2½ in., below the average height therefore, but with a cranium larger than usual. The muscular development is slight, and the teeth are less worn than those found in the chamber, with no trace of caries. The cephalic index is 77·72, indicating a slightly longer type of head than before, though both belong to a type living in England both in neolithic and modern times. In spite of a careful search, no grave furniture was found to give a clue to the date.

R. A. S.

II. The Excavations of 1919–20

Much has been revealed by the few days' excavations which were made in 1919 and 1920, but the whole story is not yet told. The present account must be taken as an instalment, which we hope soon to supplement, and may well have to correct. The first season's work was directed primarily to a careful clearing of the passage and burial chambers, but it was also found possible to make progress with the verification of the plan of the barrow and to demonstrate that the theory of a circular setting of facing blocks was untenable. The second season brought the plan to its present state and threw considerable light on the construction of the barrow, leaving for further research the possible discovery of more facing slabs and any evidence which may remain of the north end of the barrow. For the present the estimate of 185 feet for the full length from north to south may stand.

The site is little if at all raised above its immediate surroundings, and the barrow was probably set out on level ground. The wider end, containing the burial chambers, is at the south, towards the Ridgeway. It is 43 ft. wide, and in it were set four large standing stones, which now lie prostrate in front of it.

Two of these stones were at the east and west angles respectively, the other two irregularly spaced between them, and the entrance to the grave chamber was between these two stones, though not, as it seems, on the long axis of the barrow, and therefore not in the middle of the south end. The stones, like all others in the barrow, are sarsens, and though not to be compared with the great stones of Avebury or Stonehenge, are yet of sufficient size to have formed an imposing front. The largest is 11 ft. long and 8 ft. wide, and must have stood between 8 ft. and 9 ft. high when in position, and all four must have projected above the contour of the barrow if, as there is reason to suppose, the highest capstone of the burial chamber was level with the top of the mound. The construction of the barrow can best be described under three heads: the mound, the revetment, and the facing.

The mound is chiefly composed of the chalky surface soil, but in the southern or head end of the barrow there is a considerable proportion of loose sarsen rubble, and this may have formed the principal material for the first 60 ft. from the south, the chalky soil being only used as a substitute when the supply of stone failed. The northern parts show only a few isolated groups of stones, and though this end has been more thoroughly robbed than the rest, it does not appear that they are the remains of a stone filling. One group, set on the original surface on the axis of the barrow, looks rather like part of the original setting out, and this is very nearly midway in the length of the barrow.

The revetment is formed of sarsen rubble, laid flat in irregular courses. A section midway in the barrow (fig. 4) shows it to consist of an inner and an outer face, the former about 2 ft. thick and the latter somewhat less, enclosing a core of hard chalk and soil, the whole being about 6 ft. thick at the bottom with a batter of about 45° on the outer face: just enough is left of the inner face to show at what angle it rose. Farther to the south, where there is much more stone in the core, the section is less clear, as regards an inner face, though it probably existed. The greatest height of the revetment cannot have exceeded 6 ft. at any time, and there are no evidences that it was ever carried right over the top of the mound.

The facing was composed of slabs of stone of an average thickness of 14 in. to 16 in., set upright along both sides and presumably the north end of the barrow. It will be seen that they were not set parallel to the revetment but, starting against its east and west faces at the south end, diverge from it northward. Eleven stones remain on the east side, of which all but four have been disclosed by our excavations. One is undisturbed in its original position;

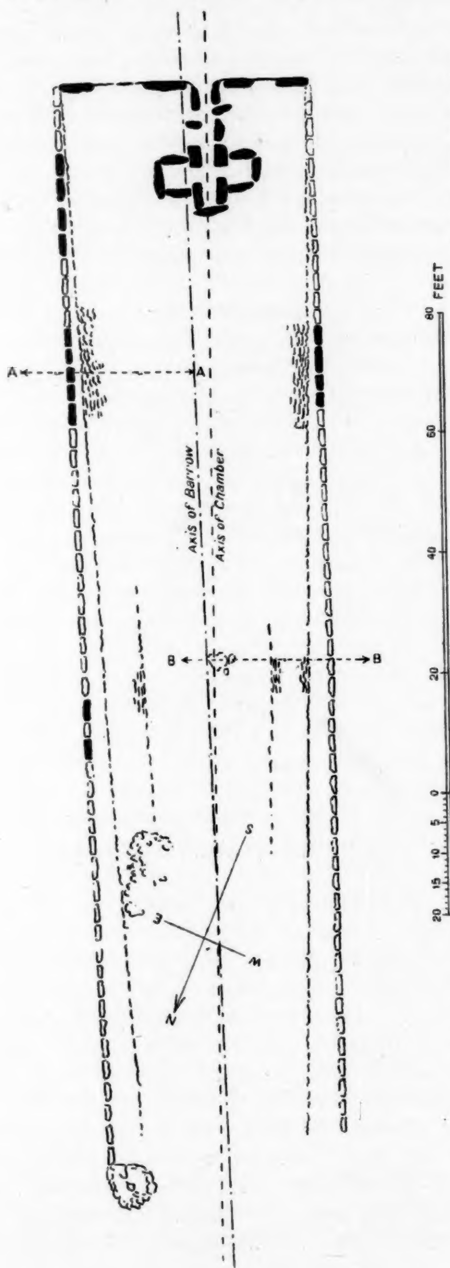


FIG. 3. Plan of Wayland's Smithy, as far as at present ascertained. Existing stones are shown in black, inferred stones in outline. The plan is based on a survey by the Rev. Charles Overy.

four more are more or less upright, the rest have fallen outwards. On the west side only four stones, all fallen, have been discovered so far. It is notable that the filling between these stones and the revetment is of pure chalk unmixed with earth, in contrast to the material of the mound. The average height of the facing stones above ground-level was about 3 ft.

Is the barrow one work or of several dates? The divergence of the facing stones from the revetment suggests the possible addition of the former, but the most material argument is found

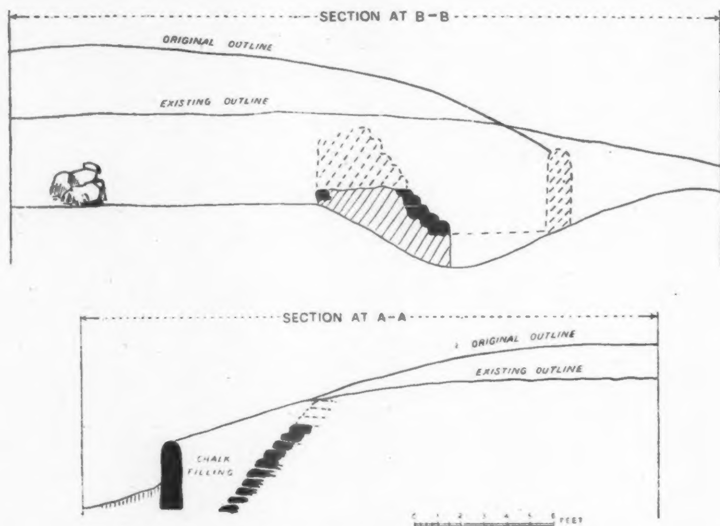


FIG. 4. Sections, showing revetment and facing slabs.

in the section (B–B). It appears that a ditch ran along the west side of the barrow, the revetment being on its inner slope, and at a level which suggests the partial filling in of the ditch when the revetment was built. The facing slabs would have made a further filling in necessary. The ditch was doubtless caused by the making of the mound, and it may be argued that the revetment is an afterthought, for if it had been intended from the first, room would have been left for it within the line of the ditch. On the east side of the barrow no ditch has so far been found, but excavations have not been carried down to the undisturbed soil. The divergent lines of the revetment and facing slabs have already been noted. At the south end of the barrow the revetment, if its general direction continued, would come practically to

the east and west angles, and the facing slabs would be set immediately against it. Constructionally, a space between the two is of value, as the slabs are ill-adapted to resist lateral pressure, and the revetment was intended to do the whole work of containing the mound. The chalk filling between the revetment and the slabs serves merely to carry on the contour of the mound. Here, again, it may be argued that if the facing slabs had been part of the original design, a space for them would have been provided in setting out the south end of the barrow, and they would have run parallel to the revetment.

The burial chamber consists of a passage 21 ft. long by 2 ft. 1 in. wide, open at the south end. Near the inner or north end lateral chambers open from it west and east, making a cruciform plan. The floor, where undisturbed, seems to be at the original level of the ground. The largest stones are the four which flank the openings to the east and west chambers, and the passage at this point would have been 6 ft. high to the under side of the capstone. The rest of the passage averages 4 ft. 6 in. in height, while the eastern chamber, the only part in which the capstone is still in position, was less than 4 ft. high. Seeing that this chamber is the origin of the cave legend, and the sole inspirer of Sir Walter Scott's romance, the value of imagination in archaeological matters is here aptly illustrated.

When it is remembered how much the body of the barrow has suffered, it is a most fortunate thing that so many of the stones of the grave are preserved. Of the uprights only one is missing and one displaced, while of the seven—or possibly eight—coverstones five are in existence, and one of them still in position. The stone which covered the north end of the passage is wedged in between the north-east upright of the 'crossing' and the capstone of the east chamber, which is still in position, though somewhat shifted in a north-easterly direction.

The capstones of the crossing and of the western chamber lie on the ground north of the grave, while the southernmost coverstone of the passage is now half buried in the ground in front of the original entrance.

The construction of the grave is on the usual lines. The upright stones are set in holes in the original ground surface, which, as far as we ascertained the depth, are comparatively shallow, but the strength to sustain the pressure of the mound against their sides was probably adequate when the monument was complete. The spaces between the stones were evidently filled with small dry-set rubble as usual. The northern stones of the two chambers and of the passage now lean inwards, but this has

probably occurred since the grave has been exposed. The construction of the southern part of the passage is interesting, there being on each side a stone set at an acute angle with the direction of the passage, and on the west side, at any rate, so much taller than the stones next it that it could not have served to carry a coverstone. I think that their object was to stiffen the side of the passage against lateral pressure, to which they obviously offer a greater resistance than the stones set with their long sides in the direction of the passage.

The one upright stone which is missing is the third from the south on the east side of the passage, and from the displacement of the soil here, and of the diagonal stone next to it on the south, and also from the loss of the cover-stones on this part of the passage, it seems that at some time an entrance has been forced into the grave at this point. There is nothing now to show how the passage was closed at the south end, but the outward curves of the two end stones are to be noted. The development of this feature is to be seen in the curves of dry-built walling flanking the entrances to the burial chambers at Stony Littleton, Uley, St. Nicholas, and elsewhere. It must be presumed that the south end of the barrow was built up in dry rubble between the standing stones, and there may have been, as at Uley, a deep lintel-stone over the mouth of the passage.

In a few instances, particularly on the inner faces of the east chamber, the stones have been carefully worked to a true face, with results which are precisely those obtained at Stonehenge.

We can hardly expect to bring the study of prehistoric tooling to anything like an exact science, as, within limits, we can do with medieval tooling ; but instances of this sort multiply, and it would be interesting to compare the dressing with the tooling at Maeshowe in the Orkneys and elsewhere. We may suppose that flints or hard stone would be the means by which such marks were produced.

The barrow when complete must have appeared as a very low and flat mound limited by the line of facing slabs. But the discovery of the contracted burial outside this line shows that the soil of the mound had extended beyond the slabs at an early date.

The rectangular plan of the barrow has a parallel in that of the chambered mound at St. Nicholas, near Cardiff, which was fully explored by Mr. John Ward, F.S.A., and described by him in *Archaeologia Cambrensis*, 1915, 6th Ser., vol. xv, pp. 253–320. The barrow, being in a district where stone is plentiful, is composed of stone slabs of various sizes throughout, and has a dry-stone

revetment built in level courses to contain the substance of the mound, with a vertical outer face, the upright slabs which are so noticeable a feature at Wayland's Smithy being absent. The construction is less calculated to sustain a thrust than the battering revetment described above, and Mr. Ward found that it had been pushed outward in many places. In the St. Nicholas barrow occur lines of stones set upright in the body of the mound, evidently to serve as stiffeners to the mass of rubble, and though nothing of exactly this character occurs in Wayland's Smithy, certain isolated heaps of stone may be the remains of some setting out of the same nature. Stone, except in the form of sarsens, is absent from the district, and earth and chalk formed a far larger proportion of the Berkshire barrow than the soil and clay found in its Glamorganshire parallel.

Another barrow which seems to have been rectangular is that of Coldrum, Kent, described in the *Journal of the Royal Anthropological Institute* for 1913, p. 76. There appear to have been facing slabs along the sides of the mound, which is now in a very ruinous condition. The proportions are very different from the normal; it appears that with a width of some 50 ft. the length was about 80 ft. Only the inner end of the grave chamber remains, and the entrance, which was at the east, is quite destroyed.

C. R. P.

Discussion

Mr. d'Almaine said he had been studying the monument for seven years, and had collected material to elucidate its problems. The machinery had to be devised and set going, the result being that the Smithy had been not only explored but reported on; and he hoped it would be permanently protected. His first motive was to prevent the sarsens being split by picnic-fires, a danger that had not been met by scheduling it in 1882 or putting it under the Act of 1913. The Inspector had given him encouragement, and he desired to express his obligations to the Earl of Craven and his agent, Mr. Beresford Heaton. Mr. Overy's plans and photographs of the excavations had been invaluable, and he looked forward confidently to the day when the enclosure would be handed over to the nation.

The President said the joint paper was one of special interest and contained enough romance to stir the imagination of all present. The legend was familiar enough, but it was surprising to find that money-offerings at the monument might go back to Caesar's time; and the survival of the legend was all the more extraordinary, as there was evidently classical authority for it in the Mediterranean area. It was illustrated about A.D. 700 on the Franks casket in the British

Museum. With regard to the treatment of human bones after burial, he might refer to the inclusion of more than one skeleton in the large Bronze Age jars of southern Spain discovered by the brothers Siret. Recent research had seriously damaged Scott's reputation as an archaeologist, but had not fixed the date of disturbance by treasure-hunters. The use of the iron bars as currency was highly probable and their identification was due, in the first place, to Mr. Reginald Smith. The cruciform plan was yet another argument against regarding everything in the shape of a cross as of Christian origin. Thanks were due not only to the authors but to Mr. d'Almaine for his initiative and excellent models; to Mr. Overy for his measurements and photographs; to Mr. Buxton for examining the bones; and to the subscribers for their enterprise in the cause of archaeology.

The Dorian Invasion reviewed in the light of some New Evidence

By Stanley Casson, M.A.

[Read 10th March 1921]

The Dorian invasion, as an episode in Greek history, exhibits few complexities. Ancient tradition is unanimous upon the fact that the invasion was at once a more or less definite event or series of events in time and a clear turning-point in historical development. Modern historians of ancient Greece have largely twisted the comparatively clear tradition of antiquity into a variety of theories,[1] and the whole question in their hands remains a problem which from their point of view is still *sub iudice*.

Archaeological research on the other hand, as is not infrequently the case, serves to amplify and explain the ancient traditions in a more satisfactory way. No very clear attempt has as yet been made by archaeologists to establish the facts of the Dorian invasion[2] or to track down the historical Dorians. But the results of recent research in the Peloponnese on sites where tradition places the Dorians in fullest force points to a culture at these sites which, appearing about the eleventh century B.C., has all the characteristics of the culture of an invader, and differs radically and completely from what we know to have been mainland culture[3] during the millennium preceding the eleventh century B.C.

The purpose of this paper is to review the archaeological evidence concerning the Dorians in the light both of the literary tradition and of some new archaeological discoveries.

But before examining the archaeological evidence it would be best to summarize the literary tradition.

1. *The literary tradition.* In using the literary traditions it will

[1] See, for instance, the curious theories of L. Pareti in *Storia di Sparta Arcaica* (Florence, 1917). He dates the beginning of the Dorian invasion in the 15th century B.C. and the end of the Late Minoan III period at 900 B.C. (pp. 139–140), believes that the Dorians were also called Achaeans (p. 87) and that they have nothing to do with either the destruction of Mycenaean culture or with the growth of 'Geometric' art.

[2] But see *The Early Age of Greece*, *passim*, and *Anthropological Essays presented to E. B. Tylor*, *1907*, p. 295, 'Who were the Dorians?'

[3] Wace and Blegen, *B.S.A.*, xxii, pp. 175–89.

clearly be best for the purposes of this paper to draw only from the best and clearest sources.

The Dorians, says Herodotus,[1] were new-comers (ἐπήλυδες) to the Peloponnese. Pausanias, speaking generally of the Dorian invasion, says that it 'threw the whole of Peloponnese except Arcadia, into confusion'. Later, in his eighth book,[2] Pausanias gives a clear and explicit account, based on what seems to be Arcadian tradition, of the two waves of the Dorian invasion in the time of Echemus of Arcadia. 'The Dorians', he says, 'in attempting to return to the Peloponnese under the leadership of Hyllus, son of Heracles, were defeated in battle by the Achaeans at the Isthmus of Corinth.' Later the Dorians made a second attempt in the time of Cypselus, king of Arcadia. 'This time they came not by the Isthmus of Corinth as they had done three generations before, but in ships to Rhium.'

It is thus clear that the invasion was in two separate streams, each apparently independent of the other both in time and geography. We have the record of at least a century of invasion—'three generations' says Pausanias. The main tradition preserved is clear and explicit and such as might well have survived in Arcadia, which, partly from its position between the two streams of invasion, partly from its mountainous and inaccessible nature, and partly from its pacific attitude to the invaders,[3] seems to have escaped the rigours of the invasion. The points of entry of the successful and of the unsuccessful attempts upon the Peloponnese fall on the line of the two main routes from north to south, which lie on each side of the *massif* of the north Greek mainland.

Rhium is the most northern point of the Peloponnese, at the narrowest part of the Gulf of Corinth, and is the natural bridgehead for invaders who have reached the Gulf by the western route from the north by way of Stratos, the Ambracian Gulf, and Dodona. Unfortunately we have no clear tradition as to the halting-places of this stream of invaders; the fact that Rhium alone is mentioned gives a certain verisimilitude to the suggestion made above that this tradition is Arcadian. Theorizing by later geographers or historians would have produced a far more exact itinerary. The account of Pausanias is just the type of story that one might expect him to find still current in Arcadian folk-lore. The Cromwellian wars in England have left traditions of a similar type behind them among the English country people.

The other stream of invasion, though it met with a check at the Isthmus, must have succeeded later. It clearly came from the direction of Thessaly and the north by way of the Boeotian plains,

[1] viii. 73. [2] ii. 13. 1. [3] See Paus. viii. 5. 6.

north Attica, and the Megarid. The Isthmus would be its natural objective. One of its halting-places is mentioned in a well-known passage by Herodotus, where he states[1] that the Dorians in the time of Deucalion dwelt in Phthiotis and moved later to Histiaeotis. Later still they moved to Pindus and there dwelt under the name of Makednoi.[2] Pausanias[3] says that the Dorians came from Oeta, and mentions the Dryopians as though they were similar invaders, saying that they came from Parnassus.

So much for the best and principal elements of the literary tradition. The facts which emerge are few:

(*a*) The invasion came from the north and lasted at least a century.

(*b*) The invaders came in two streams, one on the west and one on the east. That on the west met with no opposition. That on the east seems to bulk more largely in tradition, and although the one specific incursion mentioned by Pausanias was checked at the Isthmus, there can be no doubt that large bodies of invaders penetrated by this route. The mention of halting-places about Pindus, Histiaeotis, Phthiotis, and Oeta show how much record of this route was preserved. The absence of mention of place-names on the other route is significant.

2. *Archaeological evidence.* At the outset any estimate of the archaeological evidence must be conditioned by one simple consideration. In looking for archaeological evidence of Dorians how can we know what to look for if our only knowledge of Dorians is gleaned from literary tradition? To assume that certain types of object are Dorian and then to infer from their distribution the extent of area occupied by their makers would be a *petitio principii* in its worst form.

But the fallacy can be avoided. We must first fix on a site where the Dorians are universally placed by tradition. If there we can establish a stratification which belongs neither to the Mycenaean or sub-Mycenaean period, nor yet to that of Hellenic culture proper, then that stratification will, perforce, belong to some intermediate period. The only culture of importance belonging *by ancient tradition* to this intermediate period is that of the Dorian invasion. It follows, then, that every object found in such strata belongs to that culture.

With a series of objects thus attributed we can search for

[1] i. 56, repeated by Steph. Byz. s. v. Δώριον.

[2] Elsewhere (viii. 43) Herodotus says that the men of Sicyon, Epidaurus, and Troezen are Δωρικόν τε καὶ Μακεδνὸν ἔθνος, having come latest of all from North Greece.

[3] v. 1. 2.

similar objects and strata in other parts of Greece. Our conclusions will show to what extent the distribution of such objects agrees with the literary records.

The obvious place to look for such a site where these conditions may be found is clearly Sparta. From what direction the Dorian invaders reached this town and consequently from which of the two streams of invasion they came will remain uncertain. In all probability they came by both streams.

The fact remains that some time in the Dark Age of Greece, between the fall of Mycenaean power on the mainland and the rise of Hellenic civilization proper, the Dorians reached Sparta. Whether they were the destroyers of the Mycenaean culture of the mainland or not is a problem which will be dealt with below.

The evidence of archaeological excavation at Sparta is precise and complete. These excavations were carried out in the years 1907–10 by the British School at Athens, and showed beyond dispute that the Mycenaean site in the plain of Sparta had come to an end with the fall of the culture it represented, remaining deserted and unbuilt upon. Subsequent inhabitants of the plain started afresh on and near the rocky hill that later became the Acropolis of classical Sparta. The Mycenaean town, abandoned and empty, fell into ruins. Both on the summit of the Acropolis, on the site dedicated to Athena Poliouchos or Chalkioikos, and below on the banks of the Eurotas at the site later associated with the cult of Artemis Orthia, stratified areas were found. In each case the stratification was clear and began from the natural rock, a starting-point that is always an indisputable fact in a stratification. Of the two sites [1] that of Athena Chalkioikos seems to have been the older.[2] The lowest stratum here contained no bronzes [3] and only fragments of so-called geometric ware. This stratum can be roughly dated to the tenth century B.C.,[4] while the similar stratum at the Artemis Orthia site belongs more to the ninth century. These dates are arrived at from internal evidence by the establishment of a central chronological point in the stratification [5] and allowing a period of 150 years for all the preceding strata.[6]

The latest part of the lowest stratum contained bronze ornaments of geometric type—figures of horses and birds, crude and

[1] Referred to hereafter as that of Athena Chalkioikos and Artemis Orthia respectively.

[2] *B.S.A.*, xiii, p. 72 and p. 145.

[3] *Ibid*, p. 111.

[4] *Ibid*, p. 72 and p. 136.

[5] viz. certain 'spectacle' brooches of bone, which are identical with some found at Ephesus and there dated at 700 B.C.

[6] *B.S.A.*, xiii, p. 72 and chronological diagram p. 61.

elementary and closely resembling drawings on geometric vases of the same date. The importance of these ornaments will be seen later. The figures of horses in particular seem characteristic of

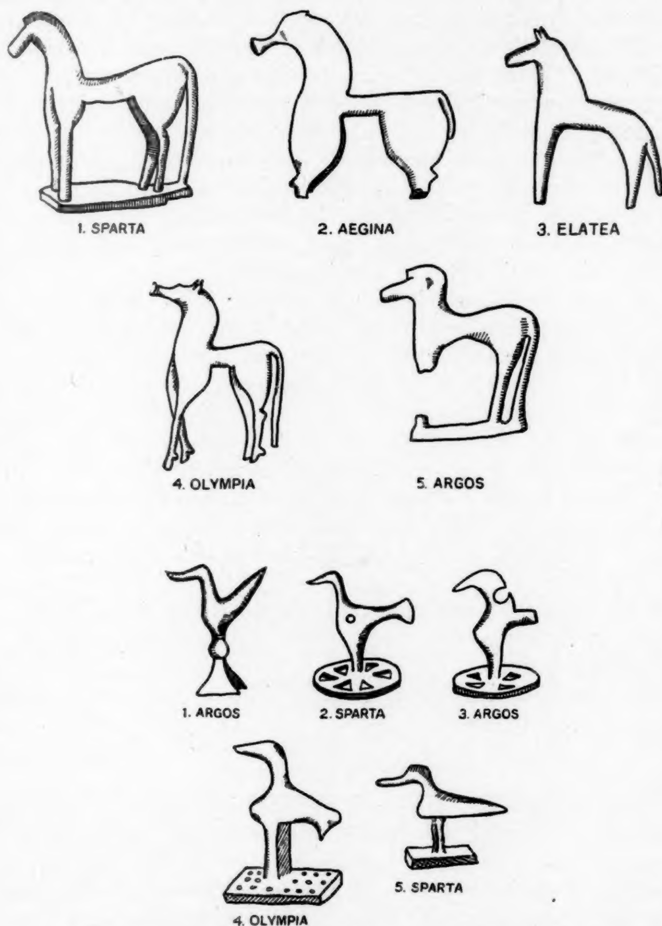


FIG. 1. Bronze Horses and Birds from various sites in Greece.

this culture. They are distinguished from other similar figures of horses of other periods by their narrow waists, bottle-shaped muzzles, long tails, and broad flanks (see fig. 1).

A further discussion of these early strata is unnecessary. The conclusions for the moment alone are of importance. We have

established a stratification in two separate sites at Sparta, which is dated by the excavators on its own internal evidence at the ninth and tenth centuries B.C. Mycenaean culture, both at Sparta and at most other places on the mainland, comes to an end somewhere about the eleventh century B.C., a date recently confirmed both for Mycenae itself[1] and for most of the Mycenaean sites of the mainland. There was at Sparta, as the excavators say[2], 'a complete break of continuity between Mycenaean and classical Sparta, bridged over only by the persistence on the earlier site of the cult of the old hero Menelaos'. We have thus a *terminus post quem* for the dating and classification of the remains of a new intrusive culture that established itself at Sparta early in the tenth century B.C., and which must have reached there still earlier, for invaders do not sit down at once in peaceful occupation. A period of at least fifty years should be allowed from the time of the arrival of the invaders to the time when they were so firmly established at the earlier of the two sites mentioned above as to leave appreciable traces of their residence. We thus reach the period 1050–950 B.C., for the main force of the invasion of the Spartan plain. In default of rival claimants of this period the invasion can only be attributed to the Dorians, who came, according to Greek tradition, between the end of pre-Hellenic and the beginning of Hellenic things. Old systems of dating, based on such traditions, usually put the Dorian invasion between 1124 and 1104 B.C.[3]

With these facts established, an examination of the chief sites of the northern mainland and the Peloponnese may lead to important conclusions.

The sites have here been grouped into a northern, a western, and an eastern group.

Western Group

Dodona. This site has been but scantily explored and slightly published. Enough has been found, however, to testify to the presence there of elements of geometric culture. Bronze 'spectacle' brooches of various types and figures of horses of the Spartan type have been found.[4] More remains to be discovered, and it is probable that the geometric culture will be found to be well represented there.

[1] *Times Literary Supplement*, 19th August 1920.

[2] Dawkins in *B.S.A.* xvi, p. 11. Cf. Peter, *Chron. Tables*, 8.

[3] Summarized in Clinton, *Fasti Hellenici* ii (1841), pp. vi–viii.

[4] See nos. 223, 296, 300 (spectacle brooches) and 640, 645, 646 (horses) in the National Museum, Athens. These have not been published by Carapanos, *Dodone et ses ruines*, Paris, 1878.

Thermon. Excavations carried out here in 1913–14 by M. Romaios produced among other objects two good examples of geometric ornaments, a bird and a horse respectively identical with the Spartan types.[1]

Olympia. The geometric site here seems to have been very extensive. A large number of bronze ornaments of the Spartan

FIG. 2. Sketch map of Greece showing sites quoted below.

types, particularly horses and birds, were found, and geometric pottery was abundant. Unfortunately the pottery and the stratifications in which it occurred, as in the case of so many German publications of early sites, remain unclassified and so cannot be adduced as evidence. The bronzes, however, afford close parallels with those from Sparta, particularly in the case of the figures of horses which show the same pinched waists, arched necks, broad

[1] See nos. 14563 and 14757 in the National Museum.

flanks, and long tails in each instance.[1] Every phase of Dorian art, if art it can be called, seems to have been represented at Olympia. The analogy of the Spartan bronzes shows the Dorian origin of the Olympia examples, for, as we have seen above, the former must be associated with the culture known as Dorian.

The view of Dörpfeld that the Olympian bronzes belong partly to pre-Mycenaean times, to the earliest culture of the Achaeans before, as he says,[2] they came into contact with Cretan and Mycenaean influences, is disposed of by the Spartan evidence. The inferences implicit in this view as to the alien origin of the Achaeans and the radical difference between them and the makers of the Mycenaean culture of the mainland open too large a question for discussion here. Ridgeway's similar view[3] that geometric art existed in the Peloponnese before the Dorians arrived is rendered equally untenable by the Spartan evidence. Geometric art does not appear in Mycenaean times at Sparta, and no other intrusion appears after this art was established there. If the Dorians were not responsible for it, no other authors can be found, certainly not Achaeans.

Leukas. Similar bronzes to those found at Olympia and Sparta were found here by Dörpfeld during his excavations on the site known as Chortata.[4] A bronze horse and bronze pins of the usual Spartan and Olympian types were found. I have not seen the actual objects and I cannot find illustrations of them, but it seems clear from Dörpfeld's description that they are of the geometric type; in fact he calls the Leukas horse a 'Dipylon-Pferd', a description which at any rate indicates its type. Other general similarities are drawn by Dörpfeld between the finds of Leukas and Olympia.[5]

[1] *Olympia*, Bronzes, pl. XIV. nos. 201, 216, 222, 223, and cf. with *B.S.A.* xiii, p. 111, fig. 2, e.g. (Sparta). Cf. also *Olympia*, Pl. XI, 158, with Sparta *loc. cit.* fig. 2. f.

[2] *Ath. Mitth.* 1906, p. 206, 'Meines Erachtens haben wir in den "geometrischen" Gegenständen dieser ältesten Schicht den ursprünglichen Stil der Achäer zu erkennen, den diese seit Alters besassen, bevor sie die vom Osten kommende kretische und mykenische Kunst kennen gelernt und zum Teil angenommen hatten', and p. 207, 'Die Bronzen und Terracotten des "europäisch-geometrischen" Stiles .... gehörten dann nicht ausschliesslich in die nachmykenische Zeit ... sondern ... konnten zum Teil sogar vormykenisch sein', and p. 217, 'In dem alten Heiligtume von Olympia und in der Stadt des Odysseus auf Leukas haben die Achäer ihre uralte geometrische Kunst lange bewahrt; fremde Kunstgegenstände finden sich dort in der ältesten Schicht nur vereinzelt', etc.

[3] '*Who were the Dorians?*' p. 296.

[4] *Ath. Mitth.* 1906, p. 208. Dörpfeld here dates them at 1500–1000 B.C. See also *Der sechste Brief über Leukas-Ithaka*, 1911, p. 19.

[5] *Ath. Mitth.* 1906, p. 208.

Eastern Group

The objects found at sites grouped under this heading are, as in the preceding group, here dealt with from the point of view of the Spartan finds, and considered from the point of view of the historical conclusions drawn as to those finds.

Thessaly. Graves dug near Theotokou in Magnesia, near Cape Sepias, by Messrs. Wace and Droop, contained pottery of an elementary geometric type. This style of ware seems to have been the result of a fusion of Mycenaean and geometric influences which took place early in the second Late Minoan period. The geometric influence was, perhaps, due to an invasion coming from Epirus over Tymphrestus 'and the later waves of geometric influence which seem required for the full Dipylon style may well have originated in the same direction. On the other hand, the Early Iron Age vases from Pateli, on Lake Ostrovo,[1] seem to indicate an origin more directly to the north'.[2] Thessalian sites proper remained deserted in the period after the Theotokou burials were made.

An important series of burials of the geometric period was excavated at Halos by Messrs. Wace and Thompson. They suggest as a date the ninth century B.C. The pottery differs very considerably from that of Theotokou and seems later in date.

Elatea. Amongst the objects found during the excavation of the temple at Elatea in north Boeotia in 1884 a sufficient number of geometric bronzes occurred to justify the conclusion that the site was fairly extensively occupied by representatives of this culture. Standing as it does at the northern entrance to the Boeotian plain, Elatea would clearly lie on the main track of invaders from the north. Several good examples of bronze birds and a characteristic bronze horse[3] were found.

Mount Ptous. A few examples of geometric bronzes have been found on the site of the temple of Apollo here, notably one of the characteristic horses of geometric style.

Athens. Bronzes in large numbers have been found in the pre-Persian strata on the Acropolis identical in type with those from Sparta. There are ten good examples[4] of horses, many birds, and other ornaments. Geometric pottery also occurs on the Acropolis. A later but close and important parallel between Sparta and Athens is found in the case of seven ivory

[1] See *B.S.A.* xxiii, p. 30.

[2] Wace & Thompson, *Prehistoric Thessaly*, p. 216.

[3] B. Paris, *Élatée*, 1892, p. 286, fig. 25, p. 285, fig. 24, and figs. 32–34, and National Museum Athens, nos. 14571, 14594.

[4] Cf. *B.S.A.* xiii, p. 111, fig. 2, e.g. with De Ridder, *Catalogue des Bronzes trouvés sur l'Acropole d'Athènes*, nos. 485, 487, 489–492, 495, 501.

figures which have all the characteristics of the latest development of geometric art at Sparta.[1] Six of these figures were found in a tomb in the Dipylon, in a grave with characteristic geometric pottery of the type which has made the Dipylon famous in archaeology. The seventh comes from the Acropolis.[2]

The significance of the whole Dipylon site and its Dorian characteristics involves important historical considerations which will be dealt with below. For the moment I am concerned with the facts alone.

Aegina. Geometric culture is well represented on the site of the temple of Aphaia excavated by Furtwängler. Pottery is perhaps our best evidence,[3] but there is a particularly good example[4] of the type of bronze horse which seems to be so characteristic of this culture.

Mycenae. The evidence from this site is of a different nature from that of the other sites and is, if anything, more satisfactory, since Mycenae was re-excavated in 1920 in the light of the Spartan and other discoveries. The results are consequently more important from the historical point of view. A careful examination of the stratification near the Lion Gate showed that the latest Mycenaean deposits were covered with, and partly included in, a thick burnt stratum and other signs of destruction which indicated the ruin of the city at the very end of the third Late Minoan period, that is to say, between 1200 and 1100 B.C. Above this stratum occurred another stratum, formed by habitation, containing pottery both of the geometric type and of an intermediate type midway in point of style between the latest Mycenaean wares and the earliest geometric. From this stratification it was clear that the city had been sacked and burnt somewhere about 1150 B.C., and that it was reoccupied soon after by people whose culture resembled that of the earliest post-Mycenaean inhabitants of Sparta.

Argos. Evidence from the site of the Heraeum as to the culture, traces of which have been found at the sites dealt with above, is abundant. Seven bronze horses of the Spartan type were found[5] as well as other animals of the geometric type. Bronze birds of the usual geometric stylized type were numerous.[6]

[1] *B.C.H.* xix, p. 273 & pl. IX. cf. with *B.S.A.* xiii, p. 80, fig. 18a and other similar ivories.

[2] *B.C.H.* xix, fig. 17, p. 294.

[3] Furtwängler, *Aegina*, pl. 125.

[4] Furtwängler, *op. cit.* pl. 113, w.

[5] Waldstein, *Argive Heraeum*, pl. 72, 8–12, pl. 73, 13, 14, pl. 74, 17.

[6] Waldstein, *op. cit.* pl. 77, 42 & 76, 40, cf. with *B.S.A.* xiii, p. 111, fig. 2, d, b, respectively, see also the other examples shown on those plates.

Pottery evidence is also abundant. A further parallel to Sparta is seen in the case of a fine bronze brooch of the 'spectacle' type.[1] Parallels of a later date are seen in some ivories, notably an ivory 'spectacle' brooch[2] and some seals similar to those of the eighth century B.C., found at Sparta.[3]

Northern Group

Lake Ostrovo. Almost midway between the Adriatic and the Aegaean and a little to the east of Heraclea Lyncestis (Monastir), an important discovery was made at Pateli near the village of Sorovitch.[4] Eighty-nine rough earthenware vases were discovered and a large number of 'spectacle' brooches of the Spartan type. The pottery, on the other hand, showed no very close affinities with known types of geometric wares and seems, on the whole, to indicate local variations.

Kalindoia. At the site near the modern hamlet of Chauchitsa, which I have recently suggested[5] is the ancient Kalindoia of Ptolemy, a cemetery covering a period from neolithic to Roman times was discovered in 1918 during the course of military operations. The bulk of the objects found there (now in the British Museum) I published in the *Annual* of the British School at Athens for 1919.[6] The objects to which I wish again to draw attention in this article are the bronze 'spectacle' brooches of the Spartan type, which should be compared with those from other sites already described. A further group of objects from the same site reached England independently, and is now in the Royal Scottish Museum, Edinburgh. I am indebted to the director, Mr. A. O. Curle, for the photographs here reproduced and for permission to reproduce them.

The plates represent the contents of three graves and a group of miscellaneous objects from the same site, including a sword. The importance of the objects in view of the above evidence is at once clear. The objects were all found during military operations,

[1] Waldstein, *op. cit.* pl. 85, 818, cf. with *B.S.A.* xiii, p. 113, fig. 3, b, d, e; it should be observed that this brooch differs from the Spartan examples in consisting of wire, a section of which would be rectangular and not circular. The same peculiarity occurs in the Pateli brooches. See also Waldstein, *op. cit.* pl. 84, 817 a, b, 819, 820.

[2] Not given in Waldstein's plates, but in the National Museum, Athens.

[3] Waldstein, *op. cit.* pl. 139, 1–3, cf. with *B.S.A.* xiii, fig. 24, b–e, p. 90.

[4] This find has not been published, but see *B.S.A.* xxiii, p. 30 & p. 32, note 1.

[5] *B.S.A.* xxiii, p. 36.

[6] *B.S.A.* xxiii, p. 32 & 36–38, & pl. vii, viii.

which involved a partial clearance of the site. Certain evidence as to the circumstances of their discovery is available, but it is, of course, not as complete as that which a scientific excavation would have produced.

Group A, plate VI, fig. 1, belongs to a burial by inhumation. The body had been covered with a cairn of stones and was extended on the back with the feet to the east. The pendants, namely a miniature jug and the horse, both of bronze, were, together with the large single bead, round the neck. The heavy bronze armlets were placed one on each upper arm. The small bracelets were near the wrists. The string of bronze beads was on one wrist. The twisted wire rings, which are of gold, were on the fingers.

Group B, plate VI, fig. 2, belongs to a burial by inhumation with the body extended so that the feet pointed to the south-west. The necklace, which is of bronze beads with a central bead of clay, and the small bronze bird pendant were round the neck. The heavy bronze armlets were placed one on each upper arm. The large 'spectacle' brooch was on the right shoulder. The position of the gold plaque was not ascertained.

Group C, plate VII, fig. 1, was also from a burial by inhumation. The body was extended with the feet to the south. There were remains of a spiral bronze chain, which was much decayed, across the chest and round the neck. The four bronze ornaments were on the chest together with the bronze bead. The position of the bronze armlet and of the plaque and spiral, which are of gold, was not ascertained. There were fragments of iron and bronze near the left side.

The objects on plate VII, fig. 2, were found at various places on the site, not associated with identified graves. Nos. 1, 3, and 8 are spiral finger-rings, no. 3 being of gold. Nos. 5, 6, 7, are bronze brooches of known geometric types. No. 9 is a heavy ring and no. 10 is a bronze armlet; nos. 12–15 are bronze beads of the type found in the other graves and in most geometric sites in the mainland of Greece. No. 11 is a bronze ornament, perhaps of classical date.

Perhaps the most important of all the discoveries is a short sword with an iron blade and a bronze hilt (fig. 3).

The similarity of the culture responsible for all these things to that which produced similar objects at Sparta, Athens, Aegina, Olympia, and the other sites is at once obvious. The horse from grave A is identical with the geometric horses in fig. 1. The 'spectacle' brooch and the little bird pendant from grave B, the gold spiral fragment from grave C, and the brooches and spiral

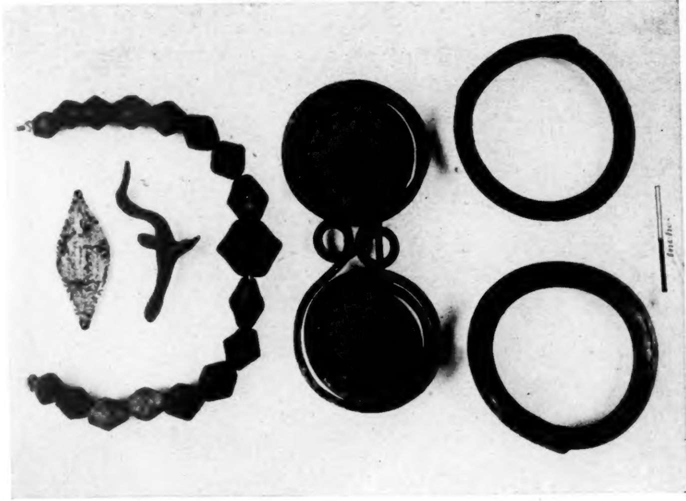


Fig. 2. GROUP B FROM KALINDOIA.

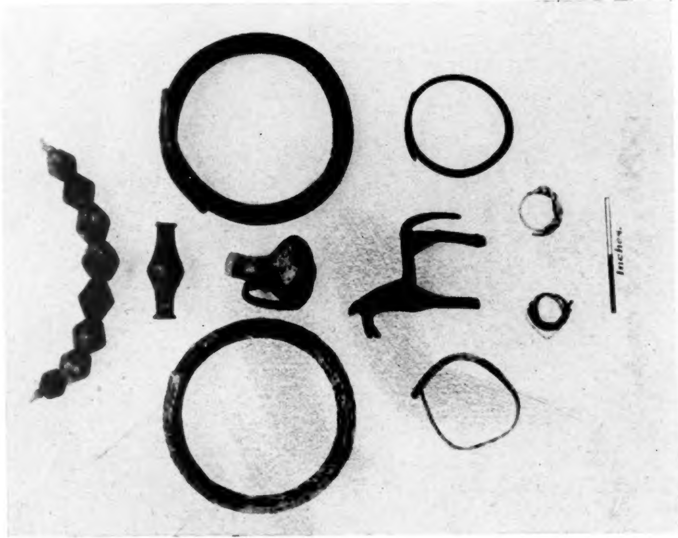


Fig. 1. GROUP A FROM KALINDOIA.

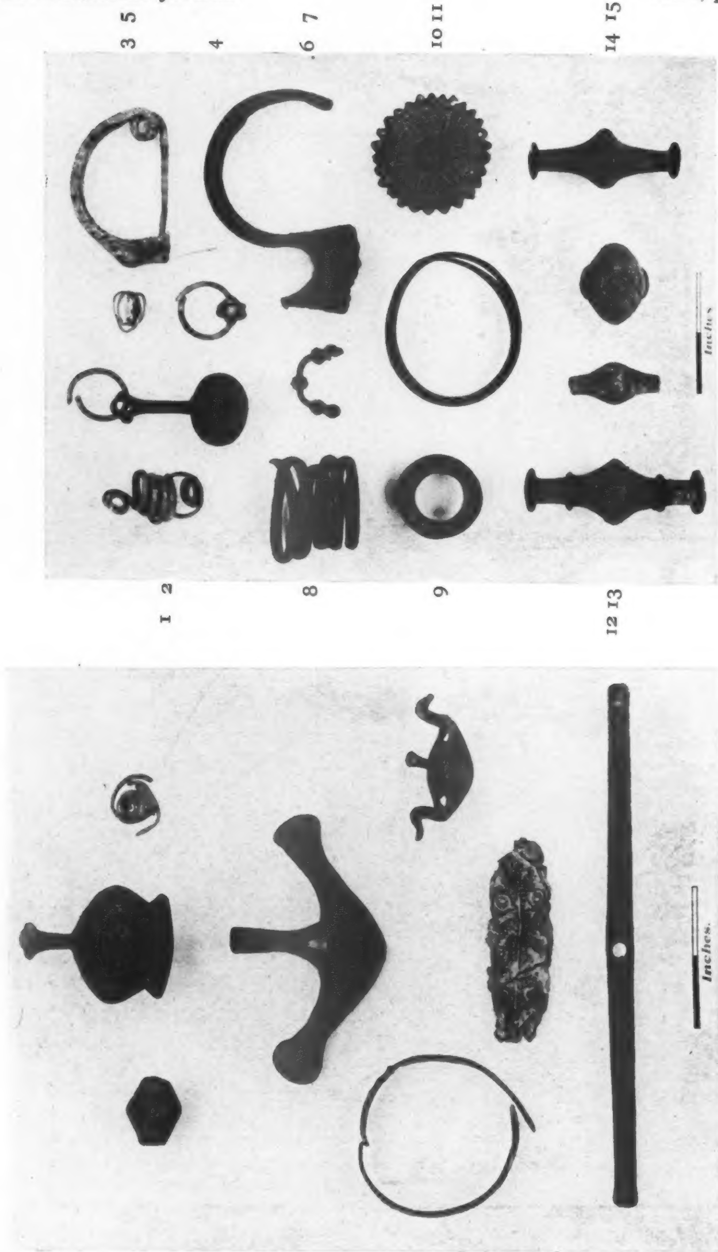


Fig. 1. GROUP C FROM KALINDOIA.

Fig. 2. OTHER OBJECTS FROM KALINDOIA.

fragments from the miscellaneous group are all characteristic of this geometric culture.

The sword is perhaps the most important of all because it gives a clue as to the origin of the people of this culture. It is of the type usually known as the 'antenna' type. The distribution of this type of sword[1] covers a wide area. It has been found in Central and Southern Europe in a region extending from Denmark and England on the north to Central Italy on the south and from midway between Vienna and Munich on the east to Lyons on the west. Many are recorded from Switzerland. This example from Macedonia is the most southern example yet found.

FIG. 3. Sword from Kalindoia.

Aivasil. A group of burials near the village of Aivasil or Haghios Vasileios, on the south shore of Lake Langaza, about twenty-five miles south of Lake Doiran, shows other close affinities to the geometric culture. The objects found here were excavated by Professor Ernest Gardner in 1916 and have been published by him.[2] A double-spiral 'spectacle' finger-ring of bronze and a geometric brooch give the connexions with the South, while an amber bead emphasizes the Northern influences already indicated by the 'antenna' sword from Chauchitsa. Both these sites fall into the same cultural area and should be considered together; an earthenware *kothon* in one of the Aivasil graves dates it as late as the sixth century B.C. Chauchitsa as we have seen covers a large period from Neolithic to Roman times.

[1] See Naue, *Die vorrömischen Schwerter* (1903) pl. xxxiv–xxxvi.
[2] *B.S.A.* xxiii, p. 21.

Conclusions

The object of this paper is not so much to catalogue archaeological discoveries as to arrive at some more or less clearly defined historical conclusion based on good archaeological evidence. The main points are the date of the Dorian invasion, the direction whence it came and the ways by which it entered Greece, and the nature of the art or culture characterizing Dorians. Literary tradition must throughout be used to check or amplify the material evidence.

The first and most important aim was to associate the term Dorian with discovered objects in order to establish the premiss 'this is Dorian'. This was effected by the stratigraphical evidence of two sites, Sparta and Mycenae. It was seen that at Sparta the period between the end of things Mycenaean and the growth of things Hellenic (such as the actual temple-buildings of Artemis Orthia and Athena Chalkioikos), that is to say, between about 1050 and 800 B.C., showed the appearance and steady development of a culture, distinguished by objects of pottery and bronze, known as geometric. In other words, a new start was made at Sparta between 1050 and 950 B.C. and a steady development took place with a clear advance and improvement of artistic ideas down to historical times[1] without any trace of other invasions at a subsequent date, or of any alien domination. If we search our archaeological records as far back as the middle of the tenth century B.C. we find no hiatus in historical development, no gap into which we can fit the latest of the recorded invasions of Greece, namely, that of the Dorians who, says Herodotus,[2] are ἐπήλυδες—'new-comers.' We are driven, therefore, to attribute the latest great invasion of Greece (before that of the Persians) to the time of the last radical change of culture recorded by archaeology. It must, then, have been the Dorians who sat down on the banks of the Eurotas and on the acropolis of Sparta, and there started the two most famous sanctuaries of that city. The earliest remains characteristic of these Dorians were, as we have seen, the so-called geometric pottery and bronze ornaments, of which small figures of birds and horses, highly stylized, seem most

[1] Ridgeway, *l. c.* 296, gives the precise date of 1104 B.C. for the Dorian invasion despite the evidence of Pausanias, who shows that it lasted at least a century. The artistic growth of Sparta, of course, closed down abruptly in the sixth century B.C. owing to a change of internal policy and the rise of a militarist aristocracy who considered that Art and Empire were uncongenial companions.

[2] viii. 73, cf. viii. 43 where the inhabitants of certain towns are said to be *Δωρικόν τε καὶ Μακεδνὸν ἔθνος, ἐξ Ἐρινεοῦ τε καὶ Πίνδου καὶ τῆς Δρυοπίδος ὕστατα ὁρμηθέντες.* This was the latest phase of the invasion.

characteristic and most strongly to retain certain artistic conventions. Among later developments of this art, carved ivories are the most striking instances of Dorian art improved by foreign influences.[1] We are thus in a position to answer the question, 'What is Dorian?' from the evidence of excavation.

Direction of the invasion. With our chief premiss established from the evidence of Sparta it becomes possible to arrive at some idea of the distribution of Dorian sites. This distribution, as has been shown, demonstrates the existence of Dorian culture in its more elementary stages along the west and east coasts of the mainland of Greece,[2] running in two lines from Dodona on the west and Magnesia on the east and meeting at an apex at Sparta. The continuation of these lines northwards is uncertain owing to the insufficiency of archaeological exploration in this direction. Enough has been found, however, to establish the existence of a small northern group of Dorian sites. This group indicates an extension of Dorian culture along a line running east and west, the base of the triangle whose apex is Sparta, a line which corresponds closely with the great prehistoric route from the Adriatic to the Aegean which later became the Via Egnatia.

A comparison of this distribution with the traditional outlines of the Dorian invasion, summarized at the beginning of this article, shows the closest possible relation between the archaeological and the literary evidence. The stream of invasion which reached the Peloponnese at Rhium must have come from Dodona, and through western Acarnania by way of Thermon across the plain of Stratus to Naupactus, sending a branch westwards to the island of Leukas. Once in the Peloponnese it passed through Elis to Olympia. From here it may have reached Sparta either by way of the Alpheius valley or further south by way of the river Cyparisseis and the plain of Stenyclarus. The occurrence of the place-name Dorion in the Cyparisseis valley is significant. Both these two routes may have been followed, and it is impossible to say which conveyed the greater number of invaders. The route taken by Telemachus[3] on his visit to Sparta was probably one of these two, but since neither Pylos nor Pherae, the only two places mentioned in the *Odyssey* as on this route, can be definitely identified, the question remains open. Dr. Leaf[4] assumes a duplication of sites in the case both of Pylos and of

[1] See *B.S.A.* xiii, p. 73–4.

[2] The islands have not been dealt with here since my object is only to examine the invasions of the mainland.

[3] *Odyssey* iii. 464–497.

[4] *Homer and History*, p. 366–7.

Pherae, and argues in favour of the Alpheios valley as being the more likely route. Certainly no chariot could reach Sparta from Pherae over Mt. Taygetus.

The second stream of invasion seems, from both the historical and the archaeological evidence, to have been by far the more important. We hear of several invasions by way of the Isthmus, some successful, some not. Pindus, Oeta, Ossa, Olympus, Histiaeotis[1], and Dryopis bulk large in legend; Magnesia alone gives some archaeological evidence, but these regions have been explored but little, and more may appear. Attica, however, gives us ample evidence for one of the halting-places of the invaders in the extensive discoveries of the Dipylon cemetery and in the Acropolis bronzes and pottery. But here, for once, archaeological evidence is flatly contradictory to the evidence of tradition. Attica, we are told, never suffered invasion before the Persians, and Dorians were never established there. The story of Cleomenes on the Acropolis,[2] who was only admitted to the sanctuary of Athena when he had explained that he was not a Dorian, suggests that Dorians were anathema to the men of Athens. But the story is not explicit. It presupposes only that Dorians were never admitted as equals with the dominant rulers of Athens, who were the indigenous old stock and not invaders: Thucydides tells us as much.[3] Ancient tradition does not say that there were no Dorians in Attica, and archaeology clearly shows that there were. The Dipylon evidence suggests a Dorian village outside the walls of the old town, tolerated but not admitted, like the villages of the Pelasgians on Hymettus.[4] The geometric bronzes of the Acropolis may well have been the offering of these Dorians to Athena. That the Dorian settlements at Sparta cannot be interpreted in the same way is clear from the evidence of tradition which states, as clearly as Thucydides states the opposite in the case of Athens, that the Dorians enslaved the indigenous population as *Εἵλωτες* or *Περίοικοι* and were their masters.

Southwards from Attica this stream of invasion can easily be followed, just as its halting-places at Elatea and Ptous indicated the route followed through Boeotia. It certainly reached Aegina and may have crossed thence to Hermione south of the Isthmus by sea. The fortress at Solygeia[5] must certainly have been taken from the sea by those of the Dorians who besieged Corinth.

[1] This Histiaeotis below Mt. Ossa (as Herodotus expressly says, i. 56) must not be confused with the Histiaeotis in Euboea.

[2] Herodotus v. 72.

[3] Thucydides i. 2; and see Hogarth *Ionia and the East*, p. 38.

[4] Herodotus vi. 137.

[5] See Grote, vol. ii, p. 312.

Indigenous hatred of the invader finds an echo in later history when Cleisthenes of Sicyon gave names to his tribes which ridiculed the names of Dorian tribes.[1] Argos gives ample evidence for another halting-place of this eastern stream of invasion; like Corinth it was invested from a neighbouring fortress,[2] and once established, the Dorians extended their conquests. Sicyon, Epidaurus, Troezen, Phlius, and Cleonae were, according to tradition, colonized by Dorians from Argos.[3] At Mycenae the full force of the destruction wrought by the invaders of the Argolid is seen in the signs of conflagration and ruin. That they subsequently occupied the town is clear from the definite geometric stratum found last year inside the acropolis walls, as well as from the evidence of a purely geometric necropolis found earlier and situated outside the walls on the old Mycenaean road from the Heraeum to Mycenae.[4] From Mycenae to Argos and Sparta is an easy journey, and the apex of the triangle of invasion is again reached.

Whence the invasion came. So much for the southern limits of the invasion of the Peloponnese. From what direction it came is less clear but obviously of the utmost importance to historians. The discoveries in Macedonia which are the excuse for this revision of the whole question of the invasion may help to provide a clue.

In Thessaly, as has already been suggested by Messrs. Wace and Thompson, geometric influence may have come either from Epirus in the west or from Macedonia in the north. Sir William Ridgeway derives the Dorians from the west coast of the Adriatic, from Epirus and Albania. But the finds at Pateli near Lake Ostrovo, at Chauchitsa, and at Aivasil all indicate that the Vardar valley was used by the makers of the 'spectacle' brooches and other bronze ornaments. The invaders, even if they came from Epirus and Albania, came from farther north still. The 'antenna' sword found at Chauchitsa, as has already been shown, belongs to a type that is most common in Central Europe. The obvious route by which it could have reached Macedonia is the Vardar valley. The 'spectacle' brooches, too, are essentially Central European in type. It should be remembered, however, that the Aivasil burials are very late, probably about the sixth century B.C.,[5] and that conditions remained unchanged both in Macedonia and in

[1] Herodotus v, 69.
[2] Pausanias ii, 38. 1.
[3] See Grote, vol. ii, p. 312.
[4] Ἐφ. Ἀρχ. 1912, pp. 127–41.
[5] Professor Gardner outlines the position thus: 'What seems clear is that Macedonia still remained within the circle of northern influence in the sixth century; it does not seem to have been fully Hellenized until after the time of Alexander.'

Thessaly right down to the beginning of historical Greece. At the same time the geometric culture that we find at Chauchitsa must have been in existence for a long time, perhaps even from early in the Bronze Age. Certainly neolithic remains were found there. Macedonia, then, was itself a halting-place for the invaders, who came from further north still. The Vardar valley in the second millennium B.C., just as in 1914, was the route by which invaders from Central Europe were to reach the Eastern Mediterranean.

The Pateli site was not on any route running directly to the north. On the other hand it *was* on a route running east and west. As such it suggests connexion with Zara and other sites on the Dalmatian coast, where 'spectacle' brooches have been found. With Dalmatia the Ostrovo region may thus have formed a western branch of the main Vardar valley invasion. Dodona and the other western sites may have been reached from Dalmatia, and the whole western stream of invasion, which is clearly of less volume than the eastern, would thus have originated in Macedonia. The traces of Dorians in Thessaly thus probably come from the north rather than from the west. A substantial meaning is thus given to the statement of Herodotus that the Dorian race was πολυπλάνητον κάρτα, and that when it dwelt in Pindus it was called a Macedonian race (Μακεδνὸν ἔθνος).[1]

With this new light thrown upon the date and direction of origin of the invasion the general historical setting becomes clearer. The origin of Dorian culture must be sought for farther north than Epirus and Thessaly, and even farther north than Macedonia. The Vardar valley leads ultimately to the Hungarian plain and so to Hallstatt. Bronze horses, birds, and 'spectacle' brooches of the types discussed above have been found in large numbers at Hallstatt, as well as an 'antenna' sword[2] almost identical with the Chauchitsa sword. But Hallstatt is only a central and better explored metropolis in a widely diffused Central European culture, and it would be a mistake to try to fix upon a too precise area as the original home of the Dorians. Hallstatt, moreover, is for the most part later in date than the culture which made the geometric strata at Sparta or Mycenae, and we must look for the earliest form of the culture which is seen in its latest forms at Hallstatt.

Three additional points, already touched upon, need further discussion.

(1) The settlement in the Kerameikos near the Dipylon

[1] i, 56. See also viii, 43.

[2] Von Sacken, *Das Grabfeld von Hallstatt*, pl. xiii, 9, 9a, 10 (spectacle brooches), pl. xv, 4–7 (horses), pl. xviii, 35, & xxiv, 6, 7, 8 (birds), pl. v. 10 (sword).

Gate must be accepted as Dorian. Andrew Lang[1] attempted to explain it away as Ionian. But the archaeological evidence directly contradicts such a view. It is certainly not Mycenaean in character. Nor can it be Achaean, for as yet we are not clear what distinguishes things Achaean. It has, on the other hand, no elements that are not geometric, so that, if our original premiss is correct, it must belong to Dorian culture. There must, then, have been a Dorian settlement in Attica living at peace with the people of Attica who were themselves of older stock and not subject to the new-comer. No violence is done to historical tradition by such a view.

(2) The second point is rather artistic than historical. How far can we attribute artistic capacity to the Dorians? The answer has already been given by G. Dickins,[2] and for the most part in the negative. Nomadic peoples from their nature are not much given to artistic production, though the germ of art may be latent in them. The artistic value of geometric bronzes and of the bulk of geometric pottery is almost negligible. Technique and form, dexterousness and method, and a certain feeling for rhythm and repetition are there, but not art, in the sense that the first aim of the craftsman was to produce the beautiful which was not merely the beautiful *to him*. But this very restraint of art led in the fuller development of Hellenic artistic capacity to that very element of regularity and symmetry that is the spirit of Doric architecture and literature of the seventh and sixth centuries B.C., of the temple of Apollo at Corinth, or of the poems of Alkman at Sparta.

With the Dorians the latent capacity for art began to evince itself at Sparta only after they had been there for at least two centuries. Alien influences from Asia Minor and Egypt, together with the lingering traditions of Mycenaean art among the indigenous Helots and Perioikoi, served as useful stimulants to the ruder and more forcible Dorian tradition.[3] The later Spartan ivories show outside influences in a way that is most striking, and the Sparta of the days of Alkman was a luxurious and artistic city. The sumptuary laws and reforms of the late sixth and early fifth centuries B.C. finally subjugated art to militarism, with the inevitable result that the former was ousted and finally suppressed altogether. This process was, in history, associated with the name of Lycurgus.

A survival of Dorian art in its finest expression is seen in

[1] *The World of Homer*, p. 146.
[2] *Burlington Magazine*, xiv, 66.
[3] See Hogarth, *Ionia and the East*, p. 39 and *passim*.

a temple of the sixth century B.C. at Prinias[1] in Crete, where a culture, probably a Dorian colony largely uncontaminated by alien influences, produced sculptures which are, in essentials, purely Dorian. The seated figure of Artemis recalls at once the ivory statuette from the Dipylon at Athens as well as many of the best Spartan ivories. The armed horsemen of the Prinias frieze find almost an exact parallel in other Spartan ivories,[2] and the horses themselves recall the bronze horses of geometric art. The fact that the temple was dedicated to an Artemis of the Orthia type[3] provides yet another link with Sparta.

(3) Thirdly, it has been clearly shown from the recent excavations at Mycenae that the Dorians were the destroyers of the Mycenaean culture of the mainland, at any rate in the Argolid. The same destruction probably took place at Sparta as well, though the traces are not so clear. The invasion was not entirely an infiltration, at least in its later stages. Early thrusts such as the unsuccessful attempt on the Isthmus served to warn the mainlanders of their danger. As a result they set about defending themselves. The rulers of Mycenae, unlike Cypselus of Arcadia, took practical measures of defence. The great walls of Mycenae were built between 1200 and 1400 B.C. during the third Late Minoan period.[4] At other sites traces of the destruction have not been recorded, but this does not argue that the destruction never took place.

The object of this paper has been to review the evidence for the Dorian invasion in the light of the most recent archaeological discoveries. Historical theories based on *a priori* historical assumptions lead to confusion. Archaeology without historical tradition and criticism is useless and leads nowhere. Much that is well known has been dealt with in this paper, but it has only been used to argue from the more known to the less known and so to interpret the new evidence which I have published.

Discussion

Professor Ernest Gardner thought the theory that the Dorians brought geometric pottery into Greece was full of difficulties: for instance, as Mr. Casson had pointed out, the most vigorous development of the style was in non-Dorian Attica. The Macedonian discoveries were a new factor but did not exhibit much geometric work. In the first two years of the Allied occupation little was found;

[1] *Annuario della Scuola archeologica a Atene*, 1914.
[2] *B.S.A.* xii, p. 78, fig. 17 a.
[3] See the pithos fragment published by Pernier in *Annuario*.
[4] *Times Literary Supplement*, 19th August 1920.

credit for the chief find was principally due to Major Anderson, who had accompanied him to the site and made a proper record possible. The date was given by a Greek vase which belonged to the sixth or, at latest, seventh century, which meant a local survival of the geometric style, the Dorian invasion having taken place five centuries before. He agreed with Messrs. Wace and Thompson that there was no contact between the North and the Aegean till Late Minoan III, when intrusive objects reached Thessaly; and there were Mycenaean relics in the upper part of the great mound above Salonika, where 20–30 ft. from the surface lay Macedonian wares that suggested contact with the Danubian region. The Dipylon geometric fabric of Attica was not only highly developed but widely distributed in Attica, and even on the Acropolis there was no other ware in the post-Mycenaean period. There was a good deal of variety in geometric pottery, and one kind existed in the Islands long before it was superseded by Minoan products. In Thera, for example, the old civilization might have reasserted itself. In any case Dorians in Attica would be a paradox.

Mr. R. C. BOSANQUET recalled the prophecy that nothing would be found at Sparta, but the British School at Athens had been fully justified by the results of excavation there, and a final account of them was awaited from Professor R. M. Dawkins. He agreed that the early geometric ware at Sparta marked the first occupation of the sites that became important later; and to the two temples mentioned might be added that of Apollo at Amyclae, where the earliest geometric ware was associated with late Minoan pottery, dating from the end of the Bronze Age. During the war he had visited the Monastir plain and had come across fragments of two vases closely resembling the Early Iron Age geometric ware of Thessaly. Albania was thus included in the sphere of influence, and the Dorian invasion had much in common with the infiltration of Albanians in later history. Mr. Hawes had shown that there were brachycephalic people in eastern Peloponnese and Albania and had found the same type of skull surviving in Crete.[1] The northern mountains always produced a surplus population that was compelled to emigrate in order to secure land or employment. Possibly the process began before the Dorian invasion, and it was clear that a large area was covered by the Danubian culture, which would have included ancient Albania in its territory. He was inclined to believe that the main source of the Dorians would prove to be the mountains of Albania.

Dr. H. R. HALL said that for the past thirty years every one had more or less accepted the connexion of geometric pottery with the Dorians; but he was inclined to agree with Mr. Casson that the Dipylon ware was Dorian in spite of the difficulty that nothing was known traditionally of Dorians in Attica. The very animosity of the Athenians seemed to imply that Dorians had once occupied Attica in force, an incident that local historians were bent on obliterating.

[1] *B.S.A.*, xvi, 258 ff.

It was quite natural for the Dorians to come south through Attica and to stay there till ejected by the Ionian inhabitants. The main line of their advance in two streams had also been generally accepted for many years past; and Mr. Hawes's examination of Cretan skulls showed, as Mr. Bosanquet had pointed out, a considerable craniological resemblance between Illyrians, Albanians, and Dorians. Mr. Casson's results from Macedonia certainly showed that the people (*ex hypothesi* Dorians) who made geometric pottery and the little figures of horses and birds in Sparta were the same as those who furnished the Macedonian graves with very similar objects, and possessed the 'antenna' sword; which justified the view that Dorians came down the Vardar valley from the Danubian region of the Hallstatt culture. Sir William Ridgeway twenty years ago postulated a connexion between early Greek post-Minoan culture and Hallstatt, but made the Achaeans, not the Dorians, the bearers of that culture into Greece. Mr. Casson merely desired to transfer the argument from the Achaeans to the Dorians; and there seemed to be no room in his theory for the Achaeans, who were, however, historical and must be found a place in the final scheme. The existence of many such difficulties only added to the interest of the inquiry.

Mr. M. S. THOMPSON stated that the site of the temple of Artemis Orthia had yielded twenty or thirty times more than any other site in Sparta; and above the bed-rock geometric pottery was found at once, to the exclusion of anything earlier. There was also a quantity of decayed amber, which proved a connexion with the North, whereas the ivory carvings found with geometric ware showed that the south coast had already been reached by the Dorian invaders; which, according to tradition, they achieved in a few generations after occupying Sparta. There they came into touch with the Mycenaean trade-routes, which accounted for the ivory. The Dorian colonies of the Mediterranean were really old Mycenaean settlements taken over by the Dorians. In northern Greece the situation was much more difficult, and at present probably insoluble. Geometric ware resembling that from Sparta had certainly been found in the north. On the other hand the ware found at Theotokou might be decadent Mycenaean. A large quantity of geometric pottery, associated with stone implements but of the Bronze Age, had been found in the Spercheius valley, and in view of its very early date, the district might just conceivably be the original Doris. In south Thessaly cremation burials had been found with iron swords and vase-fragments in the geometric style; and in Macedonia pottery with rude spirals or horns painted at the base of the handles, a motive common in the Bronze Age pottery of the Spercheius valley, was very widely distributed. As for the difficulty of a Dorian settlement in Attica, Athens had the reputation of being a refuge for the destitute: why not also for the Dorians?

Professor MYRES in replying mentioned that Sir Arthur Evans and Professor R. M. Dawkins had regretted their inability to attend the meeting. The Halos vases were specially interesting as supplying an approximate date: the brooches were contemporary but represented

two distinct traditions, the large catch being specially characteristic of Dipylon style. Earlier than the 'antenna' sword were others from Halos, generally described as Type II, and dating from the transition from bronze to iron. Portable objects and geometric pottery should be treated separately, as earthenware could not be transported like bronzes. The geometric pottery of Sparta had rectilinear patterns; that of Theotokou and Halos had some motives that were not rectilinear: clearly there were two elements to deal with, and a third tradition survived in the bowls with two high handles, which had analogies in the north-west of Asia Minor. A local art had been modified by the introduction of rectilinear motives, and the native potters had met the wishes of their new patrons, who were conquering intruders. The bronze horses and birds were on quite another footing, as they were portable, and might be used to suggest lines of communication or even of ethnic movements.

The PRESIDENT (Sir Hercules Read) said that Greek pre-history was a special study, but many of those specially concerned were present at the meeting, and the discussion had been a valuable one. The Hallstatt question had a bearing on British as well as Hellenic archaeology; but research was more hopeful where literary evidence could be adduced in addition to discoveries in the field. The latter, however, seemed to him far more trustworthy than the written word, which was always subject to the writer's personality. Professor Myres, who in Mr. Casson's absence had kindly read the paper, which presented a most attractive case, had done it ample justice.

Notes on some English Alabaster Carvings

By W. L. Hildburgh, F.S.A.

[Read 17th February 1921]

Most of the carvings herein to be described came into their late owners' hands from private collections, and—as unfortunately is generally the case in similar circumstances—in almost every instance unaccompanied by records of their earlier histories. All but three of them—the Crucifixion, the Ascension, and the one with two saints—came lately from Paris.

Four of them—the Carrying of the Cross, the Deposition from the Cross, the Entombment (pl. VIII), and the Resurrection—were obtained together, and seem, if one may judge by the close agreement in style between three of them and by the similar way in which all four have been weathered, once to have formed part of a Passion set—like the one, for example, in the reredos in the Naples Museum, which further includes a Betrayal, Christ before Pilate, and a tall central Crucifixion.[1]

The Carrying of the Cross is of a medieval type, not entirely justified by the Scriptural records, in which an executioner leads Jesus, who wears only the loin-cloth,[2] by means of a rope round His waist, whilst His mother relieves Him of a part of the weight[3] and executioners are pressing upon the cross in order to make it more burdensome.[4] In one corner is St. John with his palm. One of the executioners has what seems to be a monstrous animal (? a sign of the evil within him) either as a crest, or upon or issuing from his cap.[5] Size, 15¾ in. by 9½ in.

[1] *Catalogue*, Alabaster Exhibition, pl. i.

[2] Cf. Mrs. Jameson, *Hist. of our Lord*, 1865, vol. ii, pp. 100 *seqq.* On the table at Compiègne referred to in *footnote* 4 just below, Christ is similarly shown; on the fragment of a table given (no. 14) in the *Catalogue*, Alabaster Exhibition, He is shown wearing His robe in accordance with the accounts of SS. Matthew and Mark.

[3] Cf. Jameson, *op. cit.*, vol. ii, p. 111.

[4] Cf. P. Biver, *Arch. Jour.*, vol. lxvii (1910), pp. 81 *seq.*; also, *Cat.*, Alab. Exhib., no. 14.

[5] Compare the dragon within the crown of Maximian, in the Society's Martyrdom of St. Katharine, *Cat.* Alab. Exhib., no. 63; the monster's head similarly placed on the table of the same subject formerly belonging to the Architectural Association and now in the Victoria and Albert Museum (*ibid.*, no. 43, and *Arch. Jour.*, lxvii,

The Deposition, which is to some extent of a conventionalized type,[1] shows Joseph of Arimathea supporting the body by means of a cloth, while St. John[2] on a ladder assists in the lowering, and Nicodemus, seemingly with one knee almost touching the ground, withdraws the nail from the feet; at one side, the anguished mother clasps her hands together. Nicodemus appears curiously dwarfed; as I have been unable to find any reference to a medieval conventional representation of him as a dwarf, I am inclined to think that perhaps his misshapenness here has been due in part to the exigencies of space which have brought Christ's feet near the ground, though more probably mainly due to the carver's having followed, without comprehension (and probably not at first hand), the lines of a figure of Nicodemus kneeling while he withdraws the nail. Figures reduced in size, but approximately properly proportioned, are often to be found on the tables—the man on the ladder here is an example, while others bearing immediately upon the present question are those of Nicodemus in the Deposition of the Passion sets at Naples and in Iceland[3]—but in their cases the reduced scales seem generally to be the result of attempts to fit the figures into particular situations. The deep sense of reverence observable in the attitudes of the persons of the group (as shown clearly, for example, in Joseph's use of a cloth to support the unclothed part of the body), seems to give reasonable ground for the conjecture that the intention has been to show Nicodemus almost kneeling; and the position of his rearward foot lends support to that conjecture. Medieval representations of the Deposition in which Nicodemus stoops with bended knees while he withdraws the nail from the feet occur by no means infrequently, and in some

opp. p. 90); and the 'demon' within Diocletian's crown, in a Martyrdom of St. Erasmus (*Cat.*, no. 23). A supernatural monster appears, on the turban of the evil Dacianus, in a table of the St. George series at La Celle (cf. Biver, *op. cit.*, pl. x and p. 74). The convention, as indicative of great wickedness, was perhaps derived from the mystery-plays.

[1] Compare Jameson, *op. cit.*, vol. ii, p. 218.

[2] It is probably not mere chance that has caused the Virgin to be placed at the right of the body and St. John at the left, for that is precisely the disposition given them in the usual conventionalized representations of the Crucifixion. On the symbolism connected with this, see E. Mâle, *Religious Art in France of the 13th Century*, 1913, pp. 190 *seqq.*

[3] One of the midwives, in representations of the Nativity, is commonly shown on a reduced scale (cf. *Proc. Soc. Ant.*, xxxii, 129); and other examples of reduced figures appear in a Martyrdom of St. Eramus (*Cat.* Alab. Exhib., no. 52), in the Christ bearing the Cross of the reredos at Saint-Avit-les-Guespières (Biver, *op. cit.*, pl. v), and—even apart from those in which angels or donors appear—on many other alabaster panels.

of these he has the position (occasionally with the legs reversed) in which the carver seems here to have tried to show him[1]; I think we may therefore reasonably suppose that this uncomfortable attitude was consciously selected by medieval sculptors.[2] Whence have been derived the attitudes and the grouping of the personages of the present panel I do not know. I am inclined to think, however, that they follow some English type of Deposition, for what seems to be the closest parallel I have found to them occurs on an ivory plaque[3], in the Victoria and Albert Museum (3—1872) which has been credited to an English source and is supposed to have been made about the year 1000. A somewhat similar arrangement occurs on a diptych,[4] dated about 1350, in the same museum (367—1871), formerly thought to be possibly of English origin, but now attributed to France. On the former ivory the general resemblance is very marked; in the latter it is less so, because of the absence of Mary and of John's ladder. On both the ivories, however, we find Nicodemus shown on a reduced scale, although there was sufficient space for him to be shown larger. Another ivory panel, supposed to be English work of the fourteenth century, in the British Museum[5], shows Nicodemus kneeling to withdraw the nail, but has Mary holding Christ's hand, and John merely standing on the opposite side of the cross, according to the grouping followed in various French ivories of the fourteenth century. On the back of the alabaster VI has been scratched, perhaps as an indication of the panel's position in its set; this suggests that the panel was the first one of the second part of a 9-table set which contained an Ascension in addition to the Entombment and the Resurrection hereinunder described. Size, 17 in. by 11½ in.

The Entombment is of a not uncommon type of this often-shown subject, and—apart from the peculiar beauty and charm of some of its figures—its only unusual feature seems to be that Mary Magdalen is seated near the feet of the body of Christ and facing Him, instead of (as is almost invariably the case

[1] For various illustrations of this, see Gabriel Millet, *Recherches sur l'Iconographie de l'Évangile*, Paris, 1916, chap. ix ('La Descente de Croix'), and cf. especially remarks on pp. 469, 472, 473. Cf., also, O. M. Dalton, *Cat. Ivory Carvings ... British Museum*, 1909, nos. 282 and 268; and W. Vöge, *Königliche Museen zu Berlin, Die Elfenbeinbildwerke*, 1902, pl. 29.

[2] There seems a possibility that in some cases at least it has been due to a misconception on the part of a carver copying a kneeling figure shown—as was not infrequently the case—in a sort of perspective on a relief.

[3] Cf. Prior and Gardner, *Medieval Figure-Sculpture in England*, 1912, fig. 117.

[4] *Ibid.*, fig. 52.

[5] Dalton, *op. cit.*, no. 243.

on alabaster tables) at His head and facing towards the spectator's right. The close similarity observable between the grouping and the attitudes here and those in the Entombment of St. Etheldreda I exhibited some years ago,[1] suggests that the design of the typical Entombment of a Passion set was made to serve as groundwork when at least the example here cited of the far less frequently ordered St. Etheldreda panel was ordered.

The Resurrection shows a standardized grouping, and has no peculiar characteristics. On the back of the panel are two long parallel scratches, and a large X formed of two scratches, all of which are probably accidental and without significance.[2] Size, $15\frac{7}{8}$ in. by 9 in.

The Christ before Pilate (pl. VIII), which lacks its lower part, came from the same collection as the St. Christopher shown in pl. IX, 3. Other examples of this subject, not a very common one on tables of the Passion series, occur at Compiègne (Biver, *op. cit.*, pl. xvii and p. 81), in the Naples reredos (*Cat.*, Alab. Exhib., pl. i), and in the Toulouse Museum.[3] The present example, which differs both in grouping and in treatment from those at Naples and at Compiègne, shows Pilate's bowl supported by some kind of stand,[4] the leg of which is now missing, instead of held by an attendant as is more commonly the case in representations of this scene in art. Width $11\frac{3}{4}$ in.

A Crucifixion table, until recently in a private collection in Spain, which (as is clearly indicated by the relation between its height and its width) served as the central panel of a Passion series, shows the scene according to the conventions commonly followed on alabaster tables, and has, I think, no unusual features. Height $20\frac{1}{4}$ in., width $10\frac{1}{2}$ in.

The alabaster table of the Ascension (fig. 1), exhibited by the Rev. W. G. Clark-Maxwell, F.S.A., was found in January 1921 in a lumber room at Corrughan, Dumfries, in a house where it had been preserved since at least 1861. It is particularly interesting from an iconographical standpoint. Christ, un-nimbed, wearing a loin-cloth and a loose robe, holding in His left hand a cross-staff with banner, and with His feet upon what seems to represent a cloud, stands within a mandorla. His right hand,

[1] *Proc. Soc. Ant.*, xxix, p. 90.

[2] For a note on the marks to be found on the backs of some alabaster carvings, see E. Maclagan, *Burlington Magazine*, vol. xxxvi, pp. 64 *seq.*

[3] A. Bouillet, *Bull. monumental*, 1901, p. 62.

[4] A support of a similar kind is to be seen in some Early Christian representations of the scene; cf. Rohault de Fleury, *L'Évangile*, 1874, vol. ii, pl. lxxxiii and pp. 238 *seq.*

now missing, was probably raised in benediction. To His right looking towards Him, are the Virgin Mary and St. James (as a palmer), (?) St. Peter, and two other Apostles, while a part of the body of another shows at the side of the mandorla. To His left are St. John Evangelist, St. Andrew, and four other Apostles, the uppermost of whom is beardless (he is, excepting St. John,

FIG. 1. Alabaster table of the Ascension.

the only beardless one) and has long curls. The five figures (James, Mary, John, Andrew, and another) in the front row, and presumably the others also, are kneeling. There is a deep channel between John and Andrew's support, another between Andrew and the next Apostle, and a third between Mary and James. While Ascension tables are by no means rare, the Saviour is generally represented upon them only by His feet and the lower part of His garment, below a cloud[1]; the present

[1] *Cat.*, Alab. Exhib., nos. 3 and 8, and pl. iv; Prior and Gardner, *op. cit.*, fig. 551; Biver, *op. cit.*, p. 86; Maclagan, *op. cit.*, pl. i. Cf. E. T. Dewald, 'Iconography of the Ascension', *Amer. Jour. Archaeol.*, 1915, pp. 315 *seqq.*

representation of Him is very unusual on alabaster tables, and I recall only one similar table which has hitherto been figured.[1] Mandorlas occur fairly commonly in representations of the Ascension in other media,[2] but for some reason—possibly merely because the convention was one generally accepted during the thirteenth, fourteenth, and fifteenth centuries[3]—the conventional symbolism of the cloud and the feet was preferred by most of the English alabastermen. While the mandorla is rare upon alabaster Ascensions, it is to be seen in a Conception group[4] (*Cat.*, no. 57), and not infrequently surrounding the Child on Nativity tables (cf. *Proc. Soc. Ant.*, xxix, pp. 86, 83).[5] There are no marks on the back of this table. The top of the table is missing; its present height is 17 in., width 12 in.

The panel shown in fig. 2 has obviously belonged to a set dealing with the life of some saintly ecclesiastic, probably Becket, or, possibly, William of York, both of whom appear not infrequently upon alabaster tables. It represents the consecration of an archbishop, who is seated upon a throne, with his hand raised in benediction while a bishop hands him his cross-staff and another bishop puts the mitre on his head; in the background two acolytes each hold a bishop's crozier and a book. The ground is thickly sown with the characteristic flowers formed of painted dots. The background is gilt, with blank spaces where there were formerly the characteristic small bosses. The original lower part of the panel has been removed almost up to the battlementing. Upon the back is a mark, seemingly as shown in fig. 3 a, somewhat difficult to decipher as it has been complicated by what appear to be irrelevant accidental scratches. Present height $13\frac{5}{8}$ in., width 9 in.

In fig. 4 is shown a table of somewhat uncommon type, carrying two standing saints, the brothers James and John. The former is recognizable not only by his pilgrim's garb, but also by the scroll which he holds and upon which can still be traced the first words of that article of the Apostles' Creed which was supposed to have been composed by him: 'Qui conceptus est de Spiritu sancto, natus ex Maria virgine.' St. John, upon whose breast IA has been lightly scratched, holds a golden cup from which issues a fearsome green winged serpent, and a scroll

[1] In the reredos in the church of Saint-Michel, at Bordeaux; cf. Biver, *op. cit.*, p. 85 and pl. xviii.

[2] Dewald, *op. cit.*, *passim*.

[3] *Ibid.*, p. 351.

[4] Now on loan at the V. and A. Museum.

[5] It is, of course, a regular accompaniment of the Virgin Mary on 'Assumption' tables.

bearing the article ascribed to him—'Passus sub Pontio Pilato, crucifixus, mortuus et sepultus est'—of which only the beginning is still legible. The table, which retains much of its original colouring, was formerly in a convent near Liège. Size 16 in. by 11 in.

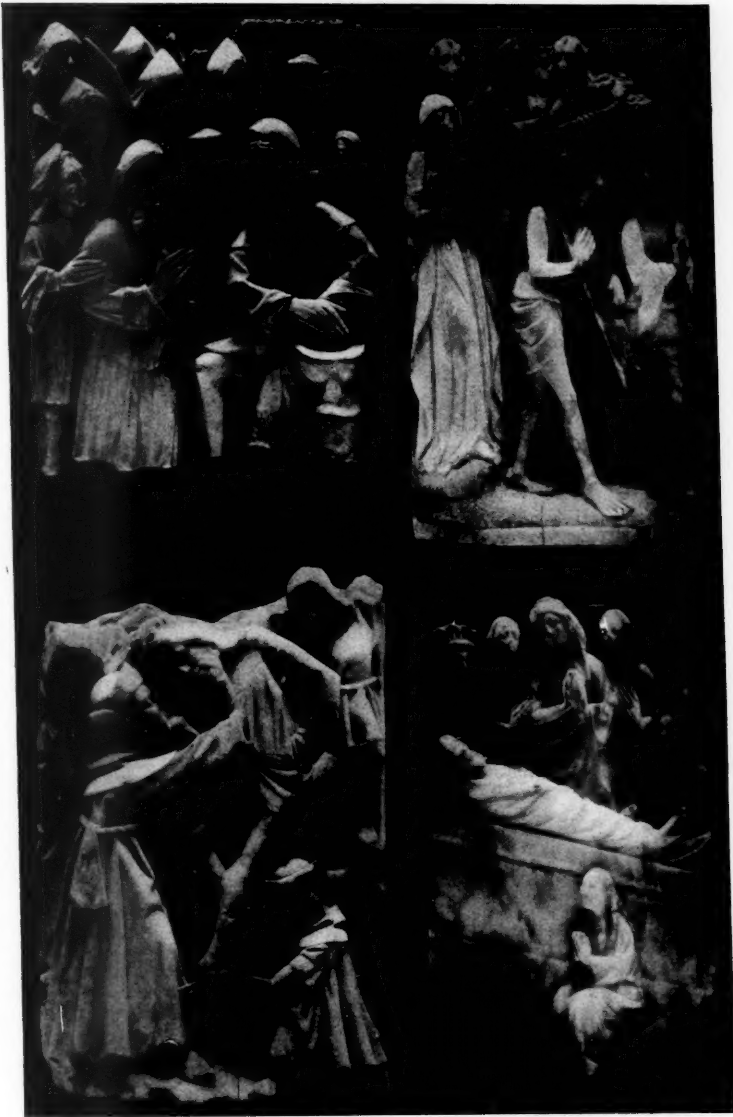
The four images on pl. IX, all representing St. Christopher,

FIG. 2. Consecration of an Archbishop.

have, as is indicated by their flat backs, been intended for placing against a wall or other flat surface, and their form, rectangular as to its lower part only, suggests that they were prepared for use as isolated figures rather than as portions of reredoses.[1] Alabaster figures of St. Christopher, although now comparatively rare,[2]

[1] Cf., however, note on last figure of St. Christopher.

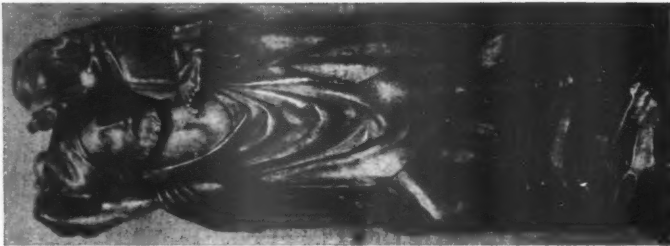
[2] There is a statue of St. Christopher at one end of the reredos at La Celle (Eure) (cf. Biver, *op. cit.*, p. 77 and pl. viii), and an image-panel of him in a Virgin set at Châteaulaudren (cf. *Cat.*. Alab. Exhib., p. 47). Of the present four images, three came recently from Paris, without prior history attached; the smallest was acquired in England.



CHRIST BEFORE PILATE — CHRIST BEARING HIS CROSS

THE DEPOSITION — THE ENTOMBMENT

4



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1

ALABASTER IMAGES OF ST. CHRISTOPHER

were, we may reasonably suppose, probably once very common in England, because some sort of representation of St. Christopher was formerly to be found in almost every English church.[1] The close resemblance in attitude, etc., among the four images is striking, and seems to show that the type followed had become standardized in England by the time these images were made. That large flat-backed images were made by the alabastermen, seemingly in preference to images in the round, may possibly have been due to the skill and practice they acquired through their continued manufacture of the scenic tables; or, possibly, because images of the panel-type were more easily and safely transportable than alabaster images in the round.

FIG. 3. Marks on alabaster tables.

The finest of the four is that (pl. IX, 1) recently presented to the Victoria and Albert Museum, by a committee of his friends, as a memorial to the late Cecil Duncan Jones, which is remarkable not only for its unusual beauty but also for its exceptional size.[2] The giant is wading, as in the other images here shown, bearing the Child seated upon his left arm and shoulder, and supporting himself by means of a great staff which he here holds in both hands. As in those other images, the Child is cloaked, and He raises one hand (here wrongly restored; it should be blessing) whilst in the other He holds a globe. Foliage, consisting here of a group of naturalistic leaves, is at the upper end of the staff in

[1] Cf. Mrs. Collier's 'St. Christopher . . . in English Churches', *Arch. Jour.*, 1904, p. 137.

[2] Two other exceptionally large alabaster figures, at the Cluny Museum, may here be recorded: an Assumption of the B.V.M., which is considerably larger than the present figure; and a St. Ursula, which is (I think) a little larger.

accordance with the legend which tells how Christopher discovered, on planting his staff in the sand when he had reached the land, that it had borne leaves and flowers. At the base of the image is a priestly donor, with a scroll (now blank) running upwards. The top of the saint's cap is missing, and the hands and one foot of the Child have been restored. The image still retains much of its original colouring. Height $37\frac{3}{4}$ in., width $12\frac{1}{2}$ in.

FIG. 4. Alabaster table of SS. James and John.

In the second image (pl. IX, 2) St. Christopher, who wears a flattish cap, has his feet projecting in a curious way beyond the water (here represented conventionally in a manner [1] also to be observed on the two images next to be described; observe also the angles indicating the positions of the submerged parts of the legs), seemingly in order to suggest the translucency of the water,

[1] To be seen also on a table showing St. Armel (*Cat.*, Alab. Exhib., no. *66*), whose general treatment suggests that it and the present image came from the same workshop.

and his staff bears foliage oddly shown as a number of polyhedral knobs. This peculiar treatment of foliage has been noted by Prior and Gardner (*op. cit.*, p. 491), who refer to several examples of it. Such examples are by no means rare, for several were already known to me when Dr. Philip Nelson kindly brought to my attention a number of others he had recorded. In the smaller South Kensington St. Christopher (pl. IX, 4) something of the same polyhedral treatment may be seen, but less clearly marked. The Child's orb has a hole which shows that formerly it was surmounted by a cross—probably a metal one. On the back of the image IIIV has been scratched.[1] Size, $25\frac{1}{4}$ in. by 10 in.

The third St. Christopher (pl. IX, 3), who wears a sort of Phrygian cap, has unfortunately lost the top of his staff, so that the treatment of its foliage is not available for comparison. On the back of the image are several marks (fig. 3, b and c), including an X, about 1 in. high, deeply graven with small broad cuts, a pair of parallel lines about $1\frac{1}{2}$ in. long, cut in the same way, and three parallel lines (III) which seem to correspond in intention to the IIIV on the previous figure. Size, 18 in. by 6 in.

The smallest image, which belongs to the Victoria and Albert Museum, and in which the Child is nimbed, has been ornamented by means of light lines of gold paint, in a manner similar to that common amongst the small continental alabaster panels of the late sixteenth century. As it forms a pair with a female saint thought to represent St. Etheldreda, and as its dimensions are suitable, the possibility that it formed one of the terminal figures of a reredos has been suggested.[2] Size, $16\frac{1}{2}$ in. by $5\frac{1}{2}$ in.

[1] This suggests that, despite its seemingly unsuitable form, the image has formed part of a reredos; cf. Deposition table, *supra*, and various other tables similarly bearing numerals.

[2] Cf. *footnote* 2, p. 228, *supra*.

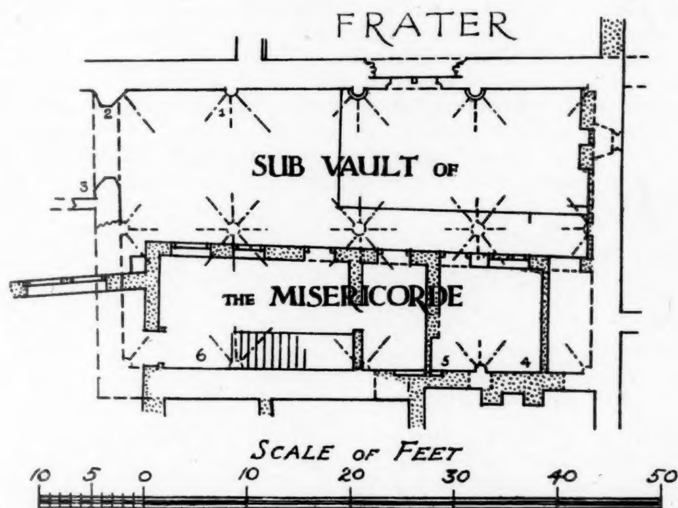
Notes on some Recent Excavations at Westminster Abbey

By Rev. H. F. Westlake, F.S.A.

Until the publication in 1911 of *The Abbot's House at Westminster* by Dr. Armitage Robinson, it had been assumed by all previous investigators of the monastic buildings at Westminster that the Misericorde stood upon the site of what is now Ashburnham House. From documentary evidence Dr. Robinson was led to the conclusions that this site was actually that of the Prior's House, and that the Misericorde lay either in an angle south-west of the Frater and contiguous with it, or in a loft at its west end as at Durham. He inclined strongly, however, to the former hypothesis, influenced by the remains of two vaulting-shafts on either side and south of a hatch communicating with the Frater. One further conclusion was that the Misericorde was upstairs. 'If there was a vaulted chamber under the Misericorde which formed part of a passage to the kitchen, all the facts fit in well together.' It may be remarked that further documentary evidence has served only to confirm Dr. Robinson's view, but until recently no attempt has been made at any serious investigation of the site, though the late Clerk of the Works, Mr. Thomas Wright, sen., left some valuable notes of observations made by him on the occasion of the laying of a drain.

The site lies at the back of No. 20, Dean's Yard, and more than three-quarters of it is covered by buildings. The vaulting-shafts on either side of the hatch are beneath the floor of an outhouse and their bases lie 4 ft. 8 in. from the floor-level, the distance from centre to centre being 11 ft. 4 in. On removing the earth at the same distance to the west another similar shaft was found (no. 1 in sketch-plan). Further to the west again (2) the splayed stones of what seemed to be a doorway were found, thus fixing the line of the western wall, a portion of which was soon discovered (3) with a piece of a narrower wall at right angles to it. On removing the plaster from the wall of a coal-house (4 and 5) two filled-in low arches were found, and beneath the pavement between them the top of another vaulting-shaft, thus determining the width of the building as 27 ft. 4 in. The central line running

from east to west could not be investigated as a large drain exactly occupies it. The thick wall further west (6) was already known, though its connexion with any building north of it had not hitherto been suspected. The result of the whole investigation shows that the original building consisted of four double bays forming an undercroft just over 45 ft. in length and only about 9 ft. high, which is probably to be dated very early in the thirteenth century. In the southern wall (4 and 5) about 5 ft. from



the ground are two corbels, unsymmetrically placed as regards the arches, which evidently supported a hearthstone in the Misericorde above, a reference to which occurs in the Almoner's Roll for the year 1361–2. Documentary evidence shows clearly that this undercroft was not the kitchen itself and that the latter is to be sought to the south of it, the communication with it being doubtless through the now filled arches in the southern wall.

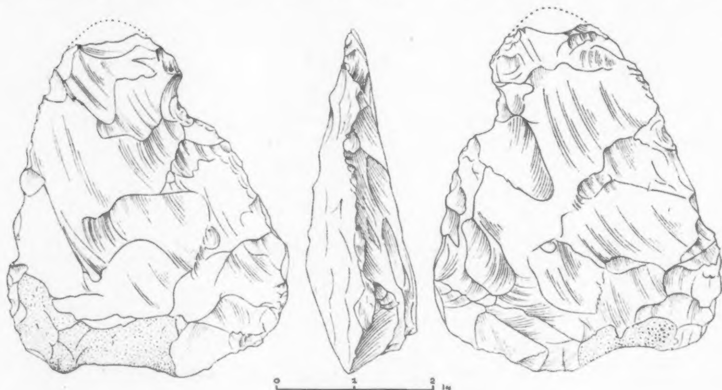
Thanks are due to the Dean and Chapter of Westminster for providing facilities for the excavation, to Canon Vernon Storr for allowing his premises to be treated somewhat roughly, and to the Clerk of the Works, Mr. Wright, for his cordial co-operation and advice throughout the course of the work.

Notes.

A Gloucester Palaeolith.—Mr. Miles C. Burkitt, M.A., forwards the following account of a palaeolithic implement from Gloucestershire, which, as far as is known, is the first implement of this type that has been found in this region of England.

The implement was found some little time ago by Mrs. Clifford of Upton Lane, Barnwood, Gloucester. It occurred some 2½ ft. from the surface of a gravel pit close to her house, and along with it were found the teeth and tusks of mammoth (*Elephas primigenius*), as well as remains of *Rhinoceros tichorhinus*.

The implement is roughly equilateral in shape (4½ in. by 4 in. extreme width) and thin for its size. The two faces are flat, not convex, and have been made by removing large feather-edge flakes. A little of the crust is still to be found at the butt. The point is unfortunately missing. The sides are straight, not crenellated, and in one of them, near the point, there is a notch, the splayed edge of which is uppermost when the notch is to the right. This is unusual, this feature generally occurring when the notch is to the left. The patina is golden brown and lustrous. The implement cannot be Chellean, as the associated fauna is cold. It might be either of late Acheulian or early Mousterian age—probably the former. It would be very interesting, therefore, for some local geologist to study these Barnwood gravels in detail, with an eye to the tracing out of terraces. The region was never glaciated, and with one of the gravels dated, much further interesting data might be collected.



A Gloucester palaeolith.

About half a mile away in gravel on the opposite side of the main road, a 'point' of Le Moustier type has also been found nearly 5 ft. from the surface, the material being flint with a bluish patina, and the only associated bones being those of the mammoth.

Discovery of flint implements at Darlington.—A find of flint arrowheads and implements has recently been made in an allotment in Cleveland Avenue, Darlington. This is the second discovery in the neighbourhood within the last few years, as a similar find is recorded as having been made in March 1918 about 100 yards away.

A Stone-axe factory in Wales.—On 19th April Mr. S. Hazzledine Warren presented to the Royal Anthropological Institute a report on the excavations at Graig-Lwyd on the slopes of Penmaenmawr, carried out last June under the auspices of the Institute. The neolithic craftsmen made their stone axes either directly from the natural blocks of scree, or indirectly by first striking off large flakes. These large primary flakes often weigh from 7 to 14 pounds, or even more, and their production in such a tough and intractable material is evidence of remarkable skill. Core and flake-implements were made indifferently, according to convenience in working the stone. Some might be mistaken for Late Chelles and St. Acheul implements, others in the preliminary stage resemble the earlier Chelles group. Flakes with faceted platforms, recalling the Levallois technique, were produced in large quantities as a waste product. Over 400 'ends of celts' (as they are usually called) were found, and 32 complete axes have been re-fitted from these halves broken during manufacture. The industry is thought to resemble that of Grime's Graves and Cissbury. Four broken polished axes were recovered from the main 'floor', and three of these had been re-chipped after breakage into make-shift blades. One stone plaque is engraved with a series of triangles. A paper on the subject was published in the Institute's *Journal*, vol. xlix (1919).

Early palaeoliths at Cromer.—At a meeting of the Royal Anthropological Institute on 3rd May, Mr. Reid Moir exhibited a large series of ochreous flint implements, cores, and flakes recovered upon a limited area of foreshore at Cromer, Norfolk. These specimens are remarkable not only for their brilliant colouration, but for their unusual size, suggesting a hand much larger than at present. Several examples referred to the Early Chelles period were associated with rostro-carinates, choppers, scrapers, points, partly-finished specimens, cores, and flakes; and it is evident that this was a factory-site in the lowest stratum of the Cromer Forest Bed, and therefore of Upper Pliocene age. In connexion with these large flints, it is of interest to note that the massive human fossil jawbone found at Heidelberg in Germany was supposed to be of about the same antiquity as the Cromer Forest Bed.

The Grimsdyke.—On 11th April Mr. G. E. Cruickshank, F.S.A., conducted an excursion along the Grimsdyke, a prehistoric rampart and ditch that in part coincides with the boundary between Middlesex and Hertfordshire. If Pinner is not the western extremity, there is at least a gap at Cuckoo Hill, and ten years' search has revealed many long stretches that prove the former course of the earthwork eastward through Hatch End, Bentley Priory, Elstree, and Barnet to Potter's Bar. The height of the bank and the depth of the ditch vary con-

siderably, and what is more surprising, the ditch is occasionally on the north side of the rampart. It is, however, clear that this boundary or defensive work was erected with infinite labour by people living on the north side of it, perhaps the Catuvellauni, whose stronghold Verulam was stormed by Caesar; and the object was doubtless to keep out the occupants of the Thames valley or invaders from that direction. Mr. Cruickshank's map when completed will be much appreciated, and may lead to a more thorough survey of similar earthworks on the Chilterns. The name is common enough in Britain; and archaeologists will one day emulate Pitt-Rivers and find a purpose and at least a limiting date for these imposing works.

Discovery at Eastbourne.—The Rev. W. Budgen reports the discovery of fifteen skeletons at Willingdon Hill, Eastbourne. They evidently belong to the same cemetery as those described in *Sussex Archaeological Collections*, vol. lii, by Mr. Strickland. Two small knives found with them are of the type usually placed in graves of the pagan Saxons; but two larger knives with thick backs are small examples of the scramasax type, rarely found in England. The skeletons are said to have lain east and west, with the head at the west end, but this is no proof of Christian burial, and the sixth century is a likely date for the cemetery.

Irish gold in Scotland.—In the *Glasgow Herald* of 30th April is an account by Mr. Ludovic Mann of a discovery in Arran for which he was partly responsible. On the 25 ft. raised beach of the west coast a gold object, generally known by the misleading name of *fibula*, was found under one of several stone slabs in February. Its weight is just over 3 oz. and the type was referred to in the *Journal* of January 1921 as possibly representing the oath-ring of Northern Europe; and a similar specimen from Islay is referable to the same source, for the type is abundantly represented in Ireland and is rare elsewhere. The other gold object was found by Mr. Mann a few inches away from the first and weighs about ¼ oz. It is of penannular form, the faces being truncated cones set base to base, like that from Heathery Burn Cave, co. Durham (*Archaeologia*, liv, 95, fig. 2); and the date of both is thus approximately fixed at the end of the Bronze Age. Both the Arran specimens have been presented to the Corporation of Glasgow and will be exhibited in the Kelvingrove Museum.

Roman Burials in Gloucestershire.—In a recent lecture to the Society for the Promotion of Roman Studies Mr. St. Clair Baddeley described over fifty interments discovered at Barnwood, near Gloucester, at an average distance of 20 yds. from the Roman road known as Irmin Street. Most of them were interments without coffins, of men, women, and children, lying about east and west, and two or three skeletons in a contracted position were evidently of persons who had met with a violent end. The inhumations were 3–5 ft. below the surface, but there were also seventeen urn burials after cremation, lying at a depth of 6–7 ft., and below all, at about 14 ft., are plentiful remains of extinct animals in gravel, including two species both of the elephant and rhinoceros. Professor Keith has been entrusted with an examina-

tion of the human skeletons; but it is hoped that the prehistoric mammals will also be considered, and human traces looked for in that deposit, as the present number of the *Journal* shows that palaeoliths do occur in the county. The excavation of a Roman cemetery is a rare and welcome event in British archaeology, and Mr. Baddeley's report is awaited with interest.

More Pile-dwellings in Switzerland.—The recent drought has done for the Lake of Morat what partial draining did for the adjacent Lake of Neuchâtel half a century ago. *L'Illustration* of 9th April 1921 gives an account of the recent discoveries and photographs of the piles laid bare on the shore at Greng; and as the shallows at the east end of Neuchâtel, known as the station of La Tène, are only five miles to the north, further light on that period of the Early Iron Age can be confidently expected.

Camps on the South Downs.—Earthworks have a perennial interest, if only on account of their vague chronology; and the increased attention given to them in recent years has still left many of their problems unsolved. Among the best known are those of Sussex, but even the excavations undertaken by Pitt-Rivers at Cissbury and Mount Caburn, near Lewes, added little to our knowledge. Mr. H. S. Toms, of Brighton Museum, who worked under him, has recently revised the evidence; and by considering the Early British relics in relation to their position in the ground and by taking oyster-shells as proof of Roman date, has come to the conclusion that the two camps mentioned, and probably others of the kind, as at Seaford and Folkestone, date after the Roman conquest of A.D. 43. His arguments are given at length in the *Sussex Daily News* of 10th March, 6th April, 4th May, and 11th June, and will no doubt stimulate discussion of a point that might have been settled forty years ago.

Roman remains in London.—Roman timber work has recently been discovered in the course of excavations for building in Miles Lane, north of Thames Street. The work would appear to have formed part of a wharf, within which buildings were erected at a later period in the Roman occupation. It has not yet been possible to make a satisfactory plan, as the remains have only been found in isolated excavations. The pottery so far discovered dates between the years A.D. 80 and 120.

Find of Republican denarius in Surrey.—A silver Republican denarius of the Gens Sergica was recently found in a field near Woodyers Farm, in Wotton parish, Surrey. The obverse bears the helmeted head of Rome and the word ROMA: the reverse a man on horseback and the inscription M. SERG. SILVS below the horse. The coin is one of those struck towards the end of the second century B.C., and appears to be similar to that recorded by Babelon in his *Monnaies de la République romaine,* ii, 442. It does not occur in Professor Haverfield's list in *Archaeologia,* liv, 494.

Roman remains at Seaton, Devon.—Major-General Wright in the course of planting an orchard in his grounds on the slope of the hill to

the north-west of Seaton has discovered the remains of a Roman dwelling. Up to the present he has only been able to uncover part of a mosaic pavement, with the remains of walls on two sides. The pavement is very fragmentary, but one corner exhibits a guilloche border in what appears to be chalk, blue lias and red tile tesserae. The whole of the room has not yet been uncovered, but patches of the same pavement have been found at various points, showing that it covered an area of about 16 ft. square. The tesserae were set in a matrix of cement, but owing to the nature of the soil, the whole, with the exception of the red-brick tesserae, has become very friable, and it is doubtful if it will long withstand the effects of the weather if left open. It is certainly not in good enough condition to stand removal. The walls are of very poor workmanship, apparently in great part composed of undressed stones and clay without any foundation, the bottom course being on a level with the pavement.

In the course of his investigations General Wright has found a number of slate roofing tiles, fragments of earthenware roofing and flue tiles, a few iron nails, and a little pottery. As far as can be judged from the very scanty remains, the room containing the pavement is probably part of a villa, and the presence of flue tiles indicates that a hypocaust must have existed near at hand. Some years ago traces of a Roman villa were found some 200 yards away, and as there is a spring close to the spot where the present find has been made, it is not improbable that a bath building in connexion with the villa previously found was situated at this spot.

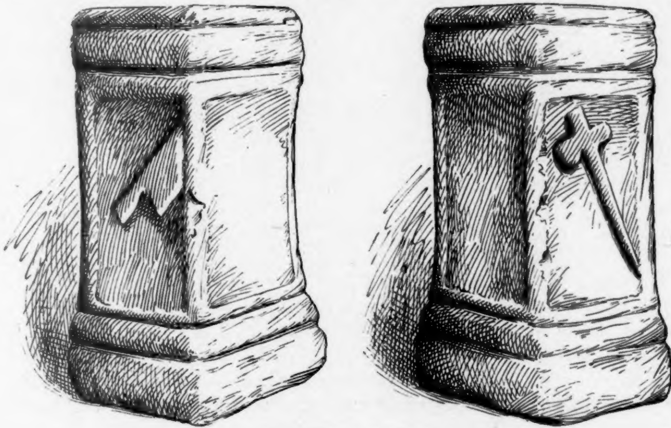
Ancient tile-factory at Minety, Wilts.—In the *Wiltshire Archaeological Magazine* xxxviii (1913–14), p. 638, is a note by the editor on the occurrence of a 'great quantity of fragments of Roman tile and brick' in a ploughed field at Oaksey Common, at the foot of Flisteridge Hill. The site was described in the *Wilts and Gloucester Standard*, and copied in the *Wiltshire Gazette*, 21st May 1914. Mr. F. Gibbons, who first drew attention to the site, suggested that it was the site of a kiln.

Mr. O. G. S. Crawford visited the site on 7th March 1921 for the purpose of recording its position on the Ordnance Map (Wilts, sheet 9, north-west). It consists of a large mound in a ploughed field, actually within the parish of Minety. The mound is situated a few yards to the east of the boundary between Crudwell and Minety, between the wood called Oaksey Nursery and the Braden Brook. The mound is thickly covered with broken fragments of tiles, both flat and flanged, and of thin tile-like bricks, some of them of a very hard vitreous nature. Many of the tiles are ornamented with comb-markings, such as occur on Roman box-tiles. Mr. Crawford did not, however, find any fragments of box-tiles on the site, nor a single fragment of pottery.

The fragments extend for a short distance round the mound on every side. About 300 yards to the south-west is another mound, on the south-western margin of a small copse. One or two similar fragments could be seen hereabouts, but not in anything like such profusion as on the larger mound.

The site would appear to be that of a Roman brick- and tile-kiln, but in the absence of pottery it is not possible to be absolutely certain of its age. Some specimens of the tiles have been given to the Museum of the Wiltshire Archaeological Society at Devizes.

Roman altar in Scilly.—There is but little history attached to what seems to be a Roman altar now preserved among the figure-heads of wrecked ships in the Valhalla of Tresco Abbey. Two views are here given from photographs kindly supplied by Messrs. Gibson and Son of Mount's Bay Studio; and these show a sacrificial knife and axe on the two sides, but there are no traces of an inscription on the front. The altar is of coarse granite, 32 in. high, 17 in. across the base, and 15 in. square at the top. The owner, Major Dorrien Smith, is convinced that it is no recent importation from the mainland, and his



Roman altar in Scilly.

predecessor, Mr. Augustus Smith, brought it from the island of St. Mary's in 1870, where it used to stand near the Garrison Hill, beside an old masonic lodge. Mr. George Bonsor thinks that it came originally from Old Town (the ancient capital of St. Mary's before the Elizabethan Star Castle was built in 1593), that being the only place where Roman antiquities have been discovered in the islands; but he himself has found earlier relics, and promises a report on his excavations carried out in 1899–1902.

London Bridge.—One of the arches of old London Bridge has recently been discovered during building operations. The exact date cannot be determined with accuracy, but it is apparently medieval, and is built of Reigate stone, with a very flat trajectory. At the beginning of the eighteenth century three flat supporting ribs, one bearing the date 1703, were added. The under surface is considerably water worn, and the arch is clearly one of those close to which stood the mill wheel, by means of which water was raised into the tower alongside the bridge. The span of the arch is estimated to be about 30 ft.

Recent archaeological discoveries in Perth.—During the autumn of last year, while some workmen were making excavations for the foundations of a new cinema house at the corner of St. John's Place and King Edward Street in Perth, a hoard of 1,128 coins (18 gold, 611 silver, and 499 billon) was discovered within a few inches of the surface on the northern boundary of the site. The gold coins consisted of 14 Unicorns, 2 Riders, and 1 Half-Rider of James I, and 1 Noble of Maximilian and Philip the Fair of Burgundy, dated 1488; the silver coins, 1 Penny of Alexander III, 1 Groat and 1 Half-Groat of Robert III, 189 Groats and 12 Half-Groats of James I, 84 Groats of James II, 56 Groats and 5 Half-Groats of James III, and 6 Groats of James IV, as well as 256 English coins of Edward III, Henry V, Henry VI, and Edward IV; the billon coins, 436 Placks and 63 Half-Placks of James III.

In making the trenches for the building a depth of more than six feet of accumulated refuse was dug into, and in the deposit were found many fragments of medieval glazed pottery, animal bones, shells, pieces of leather and of iron. In the bottom of the excavations several wooden piles were exposed showing circular holes about 1½ in. in diameter bored in the side, and still retaining the round tenons of cross wooden ties. Towards the south-east corner of the area a tripod pot of bronze, with the remains of its iron bow-handle still attached, was unearthed. The site, which lies barely 100 yards north-west of St. John's Church, the oldest building in Perth, was in olden times known as the Little College Yard.

The hoard of coins will be described by Dr. George Macdonald, C.B., F.S.A., Scot., in the next volume of the *Proceedings of the Society of Antiquaries of Scotland*, and in the *Numismatic Chronicle*.

Local War Records.—To the future student and historian of the War Period the records of local activities will furnish one of the most valuable sources of information. With a view to securing the preservation of such records, a conference was convened last autumn by the British Academy, at the request of the British Editorial Board for the Economic and Social History of the War Period, which has been undertaken by the Carnegie Endowment. A Committee was formed under the Chairmanship of Sir William Beveridge, and steps are being taken to organize throughout the country the collection and classification of the records. Many of these records may appear at the moment unimportant, but may ultimately prove to be of the utmost value for local and general history. It is therefore essential that until the records have been thoroughly examined none should be destroyed.

It is hoped that in every locality committees, composed of representatives of local authorities, local historical and archaeological societies, and others interested, may be formed to undertake the work of examination and classification. Any one willing to help in the formation of a local committee is asked to communicate with the Organizing Secretary, Miss M. Wretts-Smith, London School of Economics, Clare Market, London, W.C. 2.

Centenary of the École des Chartes.—The centenary of the foundation of the École des Chartes was held in Paris in February, and consisted of a commemorative meeting at the Sorbonne, under the presidency of M. Millerand, President of the Republic, and of a banquet presided over by the Minister of Public Instruction. The Society of Antiquaries was represented at these ceremonies by M. Camille Enlart, Honorary F.S.A., who read an address of congratulation from the President on behalf of the Society. A volume dealing exclusively with the commemoration will be issued by the École des Chartes.

International Institute of Anthropology.—The Paris School of Anthropology has taken the lead in founding an International Institute of Anthropology, which is destined to take the place of the International Prehistoric Congress, disorganized by the War. *L'Anthropologie*, xxx, nos. 3-4, gives an account of the creation and first meeting of the new body, and the following are named as British representatives:—Sir Edward Brabrook, Mr. Savage Landor, Sir William Ridgeway, and Prof. Arthur Thomson, also two from India and Canada. Dr. Capitan and Count Begouen have taken office as scientific and administrative Secretaries respectively; and the provisional council includes 25 French members and 48 from 17 other countries. Many valuable reports have been published since the first congress in 1866, and the new organization will not only record but stimulate research in fields that yearly grow more prolific and extensive. There is every reason to believe that Britain will actively co-operate in such a movement under allied auspices. The next congress is fixed for 25th July—1st August, at Liège, and the central offices of the Institute are at 15 rue de l'École de Médecine, Paris VI.

Revue anthropologique.—In 1918 the *Revue mensuelle de l'École d'Anthropologie de Paris*, after twenty-seven years under that title, became the *Revue anthropologique*, conducted as before by the professors of the School of Anthropology. A year later an *École libre d'Anthropologie* was founded at Liège by the Association for the study and teaching of anthropological sciences, and its organ has now been amalgamated with the Paris *Revue anthropologique*, which will in future be the official publication of the International Institute of Anthropology. It may be added that the *Revue* has contained in the past many important papers on palaeolithic remains from the French caves, and has done much to fix the nomenclature of that branch of anthropology. The combined forces of French and Belgian specialists should, and no doubt will, produce much that will be welcome on this side of the Channel, especially if the prehistoric interest is maintained. What applies to France and Belgium may apply also to Britain before its separation from the Continent in late palaeolithic times.

Obituary Notice.

Robert de Lasteyrie.—M. le Comte Robert de Lasteyrie, Membre de l'Institut, and one of our Honorary Fellows, who died on 29th January last, was a commanding figure among the archaeologists of France. He was born in Paris on 15th November 1849. His great-grandmother was a sister of Mirabeau. His father, Ferdinand de Lasteyrie, who served in his young days as aide-de-camp of his relative, General La Fayette, was elected Membre de l'Institut in 1860, and was the author of the *Histoire de la peinture sur verre* (1837–56), and of the *Histoire de l'orfèvrerie* (1875). Robert de Lasteyrie was studying law and archaeology when the war of 1870 broke out; he served with distinction in the army of the Loire, was wounded at Le Mans, and received the cross of the Légion d'honneur. Resuming his studies after the war, he took his degree of 'bachelier en droit' in 1871. In the following year he gave up the study of the law for archaeology, and became 'archiviste-paléographe' in 1873. His thesis for the École des Chartes, on the *Comtes et Vicomtes de Limoges*, earned him a medal in 1875. He had already so distinguished himself as to become the favourite pupil of Quicherat, the director of the École des Chartes, who in 1875 entrusted him with a course of lectures on military architecture. Two years later, when Quicherat fell ill, Lasteyrie took his place, first as 'suppléant', and then as professor of medieval archaeology at the École des Chartes, a position which he held for thirty years, from 1880 to 1910. He was an admirable professor, and his teaching had a powerful influence on the study of medieval archaeology throughout France. His influence on his pupils was expressively indicated by their veneration for 'le maître'. From 1883, as secretary of the archaeological section of the Comité des Travaux historiques, he directed the *Bulletin archéologique* for some thirty years. In 1890 he was elected a member of the Académie des Inscriptions et Belles-Lettres, of which he became President in 1901. An account of his works, which are too numerous to be set out here, will be found in the 'discours' delivered by the President of the Académie after his death (4th February 1921), from which many of the particulars in this notice have been taken. Among his more notable contributions may be mentioned his study of *L'église Saint-Martin-de-Tours* (1891); *La déviation de l'axe des églises, est-elle symbolique?* (1905); and *L'église de Saint-Philibert-de-Grandlieu* (1909). In 1902 he published his admirable *Études sur la sculpture française au Moyen-âge* (Fondation Piot). His great work, *L'architecture religieuse en France à l'époque romane* (1912), the result of his life's research and teaching, may safely be pronounced to be the best work which has yet been written on its subject, and its literary style is as excellent as its matter. Before his death he had practically completed a companion book on Gothic architecture, which it is to be hoped may be published. His interests were by no means confined to archaeology. In 1893 he was elected deputy for the Corrèze, the department in which he had

his country home, and he was for many years a director of the Chemin-de-Fer de l'Ouest. His fine character commanded the admiration of all who knew him, as was proved by the striking demonstration of respect at his funeral. Those who were privileged to enjoy his friendship will endorse the appreciation of him by M. André Michel—'l'homme, le gentilhomme complétait en lui l'érudit et le savant'.

J. B.

Reviews

The Arts in Early England. By G. BALDWIN BROWN, M.A., Professor of Fine Art, University of Edinburgh. Vol. v. The Ruthwell and Bewcastle Crosses, &c. $8\frac{3}{4} \times 3\frac{7}{8}$. Pp. 420. London: Murray. 1921.

This is an excellent new volume of an important series, sound and yet enthusiastic—a really patriotic piece of workmanship. The conclusion as to the recently disputed date of the two great Northumbrian crosses, that they are indeed works of the seventh century, is reached after a careful sifting of the evidence and in revision of Professor Baldwin Brown's own earlier view. A valuable examination of the runic inscriptions is included. Accepting gratefully all that is so generously given and clearly set out I pass to the discussion of a few details.

The traces of a coiled snake on the lower part of the old south side of the stem of the Ruthwell cross are passed over (p. 143). I have recently again examined these traces on the cast at South Kensington in a good light, and were it not that Professor Brown does not see them, I would say that no one can doubt their existence when once pointed out. There are serpentine coils, and also a well-defined head. This head is in a frontal position and comes close to the top of this lower section of the side of the cross, directly under the root of the 'tree' of scrolling foliage which fills the rest of this side of the shaft. The close juxtaposition of the head of the serpent to the root of the 'tree' is so marked that I cannot doubt the relation was intended and should be taken into account in the explanation of the cross. When this is done the question of the archer and the eagle at which he shoots may be reconsidered.

It is doubted whether the traces of an important subject at the bottom of the west front can be interpreted as the Nativity (p. 135). Again, and after re-examination, I cannot doubt. I see, at the top of the panel, two quadrupeds with their heads facing one another, then below them a large form filling the space from side to side more or less like a couch, then below again a central symmetrical shape between two others—the Infant in a basin with the attendant women. Now the treatment of the two beasts is confirmed by, and explains, two similar animals, directly below the Crucifixion on the Sandbach Cross; the rest is lost but there, too, as the comparison shows, the Nativity was represented in a similar way.

The description of the fine Crucifixion group (p. 141) is very short, and it is doubted whether the attendant figures can be identified. Comparison with the Crucifixion in the Durham book recently shown at South Kensington, and with several other representations, considered together with the profile of the forms, shows that the figures were the two soldiers. In the Durham book two angels occupy the upper angles of the space where in the relief were sun and moon. These angels are evidence as to the interpretation of the words in the poem, 'Eager ones came from far', which Professor Cook thought referred to Joseph and Nicodemus.

Professor Brown explains the lump against the left-hand margin of the panel containing the Flight to Egypt, as the rounded top of a tree—'a detail occurring in other representations of the subject'. This is true, but Joseph also frequently occurs, and as he is named in the inscription and some one is needed to lead the ass it seems reasonable to suppose that the rounded lump is Joseph's head. In some representations the party is entering the gate of a city: this I suppose may be represented by the margin of the panel, and that Joseph is supposed to be looking back as he passes through.

'It has been noticed (says Professor Brown) that the nimbus of the Ruthwell Christ is cruciferous while that at Bewcastle lacks this indication'. In the excellent photograph of the Bewcastle Christ given in Bishop Browne's pleasant volume on the Crosses, I thought I could see slight traces of indented lines forming a cross on the nimbus, and this point may be re-examined.

Professor Baldwin Brown restores the stone fragment found at Bewcastle in 1615, as a collar in a separate piece intervening between the shaft and head of the main cross. This is unsatisfactory: such construction with a tenon completely transfixing a thin stone is, at least, very unusual; no parallel to such a collar made of a separate small stone is known to me; finally the descriptions speak of the fragment as from 'the head of a cross' . . . 'the breadth at the upper end being 12 inches'. The supposition that it was part of a cross head four inches thick from back to front and inscribed like the fragment from Dewsbury in the British Museum seems best to agree with the evidence.

The 'Falconer' on the Bewcastle Cross is described as having a gauntlet, the bird 'is of the falcon kind' and the treatment is 'frankly secular'. However, the author supposes that the figure is not a portrait of Alchfrid but was 'really meant for St. John the Evangelist'. This summing up seems against the weight of the evidence. It is urged that both the Baptist and the Evangelist accompany Christ at Ruthwell, and the Evangelist is there 'unconventionally treated'. At Ruthwell the latter only appears as one of the four symbols of the Gospels: it is of small scale, and any unconventionality seems to come from the necessities of space filling. The Baptist appears at Ruthwell and Bewcastle bearing the Lamb on a disc, and thus testifying to the Christ who stands on two dragons. This is the Risen Christ triumphant over death and hell[1]. (The Irish

[1] Compare the plaster cast from a Yorkshire cross in the British Museum which I suppose has the same meaning.

Crosses had the Crucifixion on one side and the Judgement on the other). On the Ruthwell Cross the subject below the Risen Christ is that of the meeting of Paul and Anthony in the desert which stands for the institution of the Monastic Church. Above, on the arms of the cross, were the symbols of the four evangelists who doubtless surrounded the Lamb of the Apocalypse. The whole is a theological scheme. The subject-matter comprised the Birth, Life, Miracles, Crucifixion, Resurrection of Christ, the testimony of prophecy summed up by the Baptist, the foundation of Monasticism, and the Glory of the Lamb. It was a 'High' or teaching cross. The Bewcastle Cross, on the other hand, as Professor Baldwin Brown allows, was a memorial monument to Alchfrid. The coins show that the idea of 'portraiture' existed; the falcon was a badge of nobility, and it is here a symbol of princely rank (as Harold carries one on the Bayeux embroidery); directly over this figure with the falcon is the memorial inscription which names Alchfrid. It is quite impossible for me to suppose that the 'Falconer' is the Evangelist John rather than the prince of Northumbria. (Professor Cook raised objections to the falconer on chronological grounds, but see references in Sidonius).

I do not get any very clear impression of Professor Baldwin Brown's conclusions as to the art sources and affinities of the Northumbrian monuments. In one place he says (p. 391) 'motives would not be conveyed by aeroplane from Syria or Italy to Britain and dropped ready made at the feet of Irish scribes, but would be slowly diffused leaving traces wherever they passed'. In another place he allows of the sculpture that 'the figures are not Roman in type but Greek . . . the attitude of Mary in the Annunciation is . . . oriental of . . . the Syro-Palestinian type. . . . No direct early connexion between this (Northumberland) region and the Hellenistic East can be proved but the possibility of such a connexion is obvious'. Again, in another place, he argues for the native development of the foliage patterns from Roman stones and 'Samian' pottery. For myself I see a strong Coptic influence in the whole school of art. Take the Annunciation mentioned above: I do not know why it should be called Syro-Palestinian. Illustrated by Venturi is an early ivory, closely akin to the St. Mark's series, on which the two figures are standing as on the Ruthwell Cross. On the ivory the development of this type is explained; the Virgin had been spinning at the door of the dwelling but rose as the Angel approached: this type was, I believe, of Egyptian origin. Again, the Visitation on the same Cross is treated exactly as on a piece of Christian embroidery from Egypt in the Victoria and Albert Museum. I suppose the existence of a native school of art working from eastern models and illuminated books under the direction of eastern teachers would best explain the facts.

Professor Baldwin Brown questions whether Cuthbert's Cross and his little silver altar were English work; and the Ormside bowl is also given away. Of the cross it is allowed that the bosses in the re-entering angles are similar to others found on the Irish stone crosses and this, having regard to the general relationship of Irish and Northumbrian art, is strong evidence for the Northumbrian origin of the panel, and I may point out that the step patterns used as space fillings in

the Lindisfarne book and elsewhere are evidently derived from the inlaid work of such jewels as the Cross.

Of the portable altar it is remarked that 'the foliage in the corners resembles the palmette forms of Hellenistic acanthus ornament . . . parallels can be found in Merovingian and allied MSS. . . . The piece may therefore be of Gallic origin which is conceivable too in the case of the pectoral cross. Neither piece looks like Anglian work'. Now the ornament in question closely resembles that on the binding of St. Cuthbert's Gospel book, and this binding is shown to be English by its association with the text, and by having step patterns and interlacings closely like those of the Lindisfarne book.

Of the Ormside bowl we are told—'the work is not in the writer's opinion a production of this country but of Merovingian Gaul'. It is allowed, however, that 'it can certainly be ascribed to the middle or latter part of the seventh century'. Now this was the high moment of Northumbrian art. Further 'its immediate provenance may have been some monastery perhaps in Northumbria'. Again, 'the repoussé work is as Hellenistic as the best of the figure-work of the crosses'. Of late seventh-century work, resembling the crosses and belonging to a Northumbrian monastery; why then should it not be native work? Again, the Northumbrian school was famous for work in the precious metals—would it not be a remarkable coincidence if the only three pieces of such work found in the district should all be Merovingian? The main scheme of ornamentation is a fourfold arrangement of a plant springing vertically, and birds in symmetrically placed pairs. The plants are a more elaborate version of that on St. Cuthbert's Gospel, and the birds may be compared with those on Cuniborough's stone at Peterborough. The interlacing ornament of the bowl is very like that on the head of the stone cross at Irton. The Ormside bowl must also be compared with two silver cups in the British Museum, one of which was found on Halton Moor. Altogether, I believe, the weight of evidence still requires us to accept the British authorship of these works.

The description of the Lindisfarne book is excellent, and the non-Celtic elements are well brought out. On this I may again mention the origin of the step patterns in inlaid Teutonic metal work. As to what is really 'Teutonic' in such art see Emile Mâle's recent little book. What is called by Sir Maunde Thompson and others gold writing at the head of each Gospel is rather, I think, *silver*. Compare the use of silver as well as gold on Cuthbert's bookbinding. I have not seen it noticed how closely the Anglo-Celtic handwriting resembles in general appearance, roundness and spacing the Egypto-Greek hands of the fourth to sixth centuries. Note, too, the curious interchange of B for V in 'Natibitate' on the Ruthwell cross. It occurs, also, on one of the drawings of the Codex Amiatinus, and Westwood mentions other instances. Much of high interest regarding that wonderful poem, *The Dream of the Holy Rood*, is contained in this admirable volume. The authorship of Caedmon is, however, doubted. On this long ago it occurred to me—Is it not probable that when Bede tells that it was Caedmon's habit to dream his poems that the story arose from the form in which the Rood poem itself is cast? Or should we suppose

that the story about Caedmon is literally true and that the maker of the Rood poem professed to compose in the same way? or did he dream too? or, again, is the resemblance mere coincidence? The first supposition seems to me the most likely, and to strengthen the probabilities that we have on the Ruthwell cross a contemporary text of a poem by Caedmon.

Standing crosses must, I think, have been distributed widely over Christendom (see Strzygowski's recent book on Armenia). On some of the early gilt-glasses figured by Garrucci pillars are shown supporting the XP monogram in a circle, and it may be recalled that in one or more cases where the monogram in a circle is *incised* on a stone in England there is a stem or support below the circle. Such standard monograms earlier than crosses proper would well explain the prevalence and persistence of wheel-crosses.

May I just say in conclusion that it seems to have been part of Professor Brown's plan to adopt what he could approve from other students without recording the origin of every suggestion? Thus of the restoration of the cross head with the Lamb in the midst and symbols of the four Evangelists around—On the top he says was St. John with the eagle; below are two figures, one winged, the other long-haired, holding a book: 'there is little doubt that the two figures represent Matthew and the Angel . . . and we could safely postulate St. Luke and St. Mark on the two ends with the *Agnus Dei* or other symbol of Christ in the centre' (p. 124). Now this has been noticed before, and I think it might even have added to the interest of this fine book to have included in it systematic references to the work of earlier students. However, it is only a question of method, and there was probably a need for compression.[1] W. R. LETHABY.

Traits d'union normands avec l'Angleterre avant, pendant et après la Révolution. By PAUL YVON. Caen and London: Dulau. 9 × 5½. Pp. 374. 18 frs.

The connexion between Normandy and this country has at all times been very close. Based on geographical proximity, history has strengthened the link; William of Normandy brought and Louis XIV sent many Normans to England, and in each case these became an integral part of the English nation; while the Revolution led many *émigrés* temporarily to our shores.

It is not, however, the purpose of the author of this work to consider these relations, which belong indeed to history; but he has traced out in detail another link in the chain, namely the literary sympathies which arose in the latter half of the eighteenth century. The question, of course, is far from being a provincial one, and might well be studied as part of the general history of France at that period; dealing, however, only with Normandy, our author is able to treat the local manifestations of these sympathies in great detail.

Normandy, partly from racial and partly from religious reasons, has ever been in the forefront of intellect in France, and we are not

[1] On the origin of Runes, see Professor Flinders Petrie's recent volume on the Alphabet. Another account of the Ruthwell cross has just been published in the seventh report on the historic monuments of Scotland, County of Dumfries.

surprised to find an 'Académie' existing in Rouen around which gathered the best local literary talent. Many questions interested them, not least among these being contemporary English literature. This interest showed itself largely in translations of our authors, of whom Pope seems to have been the favourite. The English sympathies of some of these translators were deeper than their knowledge of the language they translated; indeed, many of the efforts crowned by the Academy were, as Mr. Yvon admits andi llustrates, rather adaptations than translations.

The emigration due to the Revolution was the cause of a much closer *rapprochement* between the two lands, and this owing to the special interests of some of the *émigrés*. England and Normandy hold their early history in common, and the documents which serve to illustrate this are found in both lands. It chanced that two Normans—Moysant and de la Rue—who sought shelter with us were specially interested in these questions. Bringing with them a considerable knowledge, they found ample material in our archives with which to increase that knowledge. The condition of our records was in those days chaotic, but what could be done to assist their research was done by our Society, which helped and encouraged the two students in every way, recognizing the value of their work not only by printing their communications in *Archaeologia*, but also in electing them as Honorary Fellows. One is pleased to think that this manifestation of scholarly sympathy met with reward, for when, at a later date, Stothard was commissioned by our Society to make his copy of the Bayeux tapestry, his labour was greatly facilitated by the gratitude of de la Rue.

We congratulate Monsieur Yvon on having revived in so capable a manner this special link between the Society of Antiquaries and his own land. Forged on the anvil of a common history and of common studies, it will serve to strengthen the *entente* which now binds the two countries. W. MINET.

Selections from the Paston Letters. Edited by ALICE D. GREENWOOD. London, 1920. G. Bell & Sons. $7\frac{3}{4} \times 5\frac{1}{2}$. Pp. xlii + 492.

Miss Greenwood has compiled this volume in the belief that many readers might enjoy an acquaintance with the Pastons who have not time to grapple with their entire correspondence. She has accordingly given the *Letters* in the 'modernized' version of Sir John Fenn, their first editor. There can be no question that fifteenth-century English letters lose much of their savour by being modernized, and the difficulties of the language are more apparent than real. Still there are no doubt some to whom the *Letters* will appeal more readily in a modern dress, and the Paston *Letters* give, of course, an unrivalled picture of social life. But they are very far from standing alone; and if the aim is to give simply for ordinary readers a picture of the times, the purpose would have been better served by extending the selection to include letters from other sources. However, within its scope Miss Greenwood's volume will prove interesting to those for whom it is intended, and she has, on the whole, done her work as editor well. There is a good series of genealogical tables, and a useful sketch-map

of the Paston country in Norfolk; the lack of such a map is a real defect in Gairdner's monumental edition. The notes alone perhaps leave something to be desired. Many have been adopted from Fenn, whose knowledge and understanding on such points as the law, agriculture, land customs, heraldry, or geography were, Miss Greenwood argues, more direct than could be the case with modern scholars. The proposition is one which it might be difficult to maintain; one of the few explanations given of a law term comes from Fenn, who clearly took it, as any modern scholar might do, from Jacob's *Law Dictionary*. Others of Fenn's notes might easily have been improved by a little research. It is not helpful to be told that the Mews (p. 85) are now the Royal Stables; but to know that they were on the site of Trafalgar Square would have been. The Lady Harcourt referred to on p. 412 was not, as Fenn conjectured, the widow of Sir Robert Harcourt, but the wife of Sir Richard; she had previously been the wife of Sir Miles Stapleton, hence her association with the Pastons. The 'well with two buckets' was not, as Miss Greenwood supposes on p. 320, an inn, but a well-known object at the corner of Threadneedle Street, by the church of St. Martin Outwich. C. L. KINGSFORD.

Anglo-Saxon Coins found in Finland. By C. A. NORDMAN. The Finnish Archaeological Society, Helsingfors, 1921. 12¾ x 10; 93 pp., with two plates.

This is a very useful, painstaking, and scholarly study, completing the work begun by O. Alcenius. The regular import of English coins into Scandinavia begins, as is well known, towards the end of the tenth century, just at the time when the supply of Arabic coins fell off —a significant fact for the history of trade. The earliest English coin found in Finland itself is a solitary York penny of Edward II, the Martyr. Of Aethelred II, Mr. Nordman records 443 specimens; of Cnut the Great, 286; of Harold I, seven; of Edward Confessor, twelve; of the two Williams, five; also seventeen Irish coins. The find-spots are bunched together in the older civilized districts in the south-west of Finland; but isolated finds have occurred in spots so remote as Kuolajärvi in Lapland, or Kronoborg on Lake Ladoga. The most surprising fact, indicating a complete change in the course of trade, is that Åland, on which many more Arabic coins have been found than on the mainland, has produced no hoards of English.

Numismatists will be interested in the author's analysis of the bearing of the finds on the vexed question of the chronology of Aethelred's types. The relative sequence, according to him, is: Small Cross (limited issue); Hand; Crux; Long Cross; Radiate Helmet; Small Cross (main issue); Agnus Dei. But he admits that the recently published Chester find makes it probable that the first issue of the Small Cross type was not so limited as he had previously supposed. G. F. HILL.

F. Haverfield 1860-1919. By DR. GEORGE MACDONALD. 9¼ x 6. Pp. 17. Milford, for the British Academy. 2*s*.

Dr. Macdonald has given us an appreciative memoir of Francis John Haverfield, his friend and fellow-student of Roman archaeology. He

traces the Haverfields to the Mendips and the Quantocks through generations of botanists, soldiers, and parsons. Haverfield's grandmother was a daughter of Jeremiah Meyer, the Würtemberg designer of the bust of George III for the coinage of 1761 and an original member of the Royal Academy, and his mother, Emily Mackarness, was the sister of two bishops. From this descent we can perhaps trace some of Haverfield's characteristics, modified or developed during his career as a scholar of Winchester and of New College, as a schoolmaster at Lancing, as censor of Christchurch, and lastly as Camden Professor of Ancient History. We can see the exactness of the scientist, the precision of the soldier, and the high purpose of the ecclesiastic in his work. In his extreme conscientiousness he grudged no labour in order to obtain accuracy, and as a consequence his work progressed slowly. His articles were typed, revised, and typed again perhaps three or four times before his fastidious taste was even tolerably satisfied. After that, as Dr. Macdonald tells us, the final fair copy was further revised 'until every unnecessary word had been erased, each phrase adjusted to its proper order'. With so much pains a somewhat laboured style might be expected, but on the contrary few could express themselves more clearly and easily. His ever ready help to a good cause and encouragement for every deserving endeavour brought him numerous friends. The pleasure it was to him to draw together those who were likely to be helpful to each other in their work will be in the memory of many. 'Whom would you like to meet?' was his invariable question, as Dr. Macdonald reminds us, when a week-end invitation was accepted.

But Dr. Macdonald, like a good biographer, does not ignore the shortcomings of his friend, although by his kindly treatment of them they only go to emphasize the more numerous good qualities. He points out that Haverfield was not made for team work; 'he was no respecter of persons and he was too impatient of the unessential, not quite ready enough to compromise or to suffer gladly those whose vision seemed to him less acute than his own.' The fact is, perhaps, that he never completely threw off the habits of a schoolmaster and criticized the work of mature Oxford dons and others as he would correct a school essay. To those who were without pride his candour was of the utmost help and value, but to others by whom his outspoken methods were not understood it was the cause of heart-burnings. But the candour meant no ill will on his part, he would spend infinite time and trouble to show those whom he had so candidly criticized, or any others, how to do better. Although his studies covered the whole field of classical scholarship, it is as an epigraphist and student of Romano-British archaeology that he will be remembered. Yet it was his knowledge of the classical writers which enabled him to extract the uttermost ounce of historical fact from the archaeological remains of the period he had made his own. The power of collecting and assimilating all that was being done in the field of Roman archaeology was marvellous, and for many years, as a friend expressed it, 'he was the clearing house for Roman Britain'. His principal interest lay, perhaps, with the explorations along the Roman wall and particularly with the excavations at Corbridge, where he spent many of his

vacations. The chief outcome of his studies is probably the essay on 'The Romanization of Roman Britain' which originally appeared in the Proceedings of the British Academy in 1906, but the Bibliography of his works prepared by Dr. Macdonald for the *Journal of Roman Studies* is long and varied. Dr. Macdonald's memoir is a model of what such a work should be. Those whose lives and works deserve to be remembered may be well content if they can feel assured that the record of their deeds shall be written by a friend no less competent, truthful, and sympathetic. WILLIAM PAGE.

Ruskenesset: en stenalders jagtplass, av AUG. BRINKMANN og HAAKON SHETELIG (*Norske Oldfund: Avhandlinger utgit av det norske arkeologiske Selskap*, Kristiania, 1920).

At the head of Mathop Fjord, south of Bergen, two habitation-sites (Ruskenesset I and II) were discovered in 1914–15, nearly sixty yards apart at the foot of a cliff, and were excavated by our Hon. Fellow Dr. Shetelig and his assistant. They are now twenty-six feet above the sea, but were probably separated during their occupation by the sea reaching the cliff between them; and were therefore suitable for people living partly on shell-fish. Owing to exceptional protection from the weather a rich fauna was recovered, including the red deer, ox, sheep, and pig, but only one bone of the dog, and that probably not contemporary. An examination of the bones suggests that the two sites were not in continuous occupation, but frequented only on hunting and fishing expeditions; and they were besides screened from the sun, facing due north. Bones of three adults and a child were also found, the last apparently not belonging to a burial, and the rest being very imperfect. The teeth showed an unusual amount of wear. Five plates of the objects give an adequate idea of the culture, and include greenstone and other celts, flint daggers and arrow-heads (mostly triangular), scrapers, strike-a-lights, and pottery. One of the pumice-stone specimens has a longitudinal groove and looks like an arrow-shaft smoother; but the main industry was in bone, with harpoons, fish-hooks, and borers preponderating. The whole series closely corresponds to South Scandinavian finds of the Dagger period about 2000 B.C., when chambered barrows were passing out of fashion and the dead were commonly deposited in stone cists. More precision will no doubt be attained before long, but it is greatly to the credit of Scandinavian archaeology that neolithic chronology has already been placed on a satisfactory basis; and this report on what might well have been passed over as unimportant by any one but an expert reaches the high standard so jealously maintained by our neighbours across the North Sea. REGINALD A. SMITH

Esquisse d'une monographie des couches quaternaires visibles dans l'exploitation de la Société des carrières du Hainaut à Soignies, par A. RUTOT (Bruxelles, 1920, extrait des *Mémoires publiés par l'Académie royale de Belgique*, IV).

This treatise was written in 1913 but was revised in accordance with the late Professor Commont's scheme, which is found to apply to Belgium as well as to the Somme valley. It contains diagrams and

descriptions of a number of sections belonging to the geological divisions known as Moséen, Campinien (not Campignien), and Hesbayen. The last dates from Le Moustier times and corresponds to the lower Ergeron of the Somme; above this, the Brabantien is equated with the middle Ergeron; and finally the Flandrien, comprising the brick-earth and Ergeron of Belgium, is contemporary with the upper Ergeron of Northern France, the closing phase of the Pleistocene. Near the base of the Hesbayen is found *Canis familiaris*, sometimes said to date only from the Danish shell-mounds; and the fauna discovered in the peaty pockets of the Campinien points to cold conditions, whereas in the corresponding deposits of the Somme valley —the middle loam, with St. Acheul industry—there is a warm fauna followed by the mammoth and its associates, heralds of a great glaciation. In the upper part of the Hesbayen were found a circular (tortoise) core and a hand-axe, both of Le Moustier character; more cores of the same type, and several points, blade-implements, and a single small ovate hand-axe occurred on the next level below; and lower down, near the base of the Hesbayen, Levallois and other flakes, one at least with faceted butt, and various cores, including an oblong $2\frac{3}{4} \times 2\frac{1}{2}$ in. from which blades have been detached longitudinally on one face and transversely on the other, an exact parallel to a common Grime's Graves type (*Report*, fig. 60). Notable also from this level are round scrapers on short broad blades; a pointed implement with flat and conical faces; an ovate and part of a triangular hand-axe. The flint finds indicate working-floors rather than occupation sites in the period of Le Moustier. M. Rutot here lays down the lines on which the Pleistocene of Belgium may be systematized, and is fortunate in being able to furnish for the Soignies pits lists of the plants and trees, mammals, molluscs, and insects, besides many detailed sections, and illustrations of the implements. Professor Commont's conclusions are found to be valid in Belgium, and the time is surely coming when they will be crucially tested in England. Under such auspices, the palaeolithic sequence in north-west Europe must soon be put beyond question. REGINALD A. SMITH.

A descriptive account of Roman pottery sites at Sloden and Black Heath Meadow, Linwood, New Forest, with plans and illustrations. By HEYWOOD SUMNER, F.S.A. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 45.. London, Chiswick Press, 1921. 3*s*. 6*d*.

Since 1853 when an illustrated report appeared in *Archaeologia*, xxxv, the existence of Roman pottery kilns in the New Forest has been recognized, but their exact date was never established. Recent excavations have rather complicated the question without affording chronological exactitude; but Mr. Sumner's new companion to the Ashley Rails volume published in 1919 is not only a charming addition to the literature of the subject, but brings us a stage nearer the desired result. His drawings of the potsherds (for whole vessels are rare) are all to the scale of one-third, with solid black half-sections in the modern diagrammatic style; but their severity is redeemed by a frontispiece representing phantom pack-animals being led through

the forest glades with products of the local kilns; while a map of the sites and the section of a kiln being fired are full of life and interest.

Most antiquaries associate with the New Forest kilns a hard, reddish-brown stoneware with metallic lustre, or a softer black-coated ware with decoration in white slip, both well represented in the British Museum; but of recent years very little of these wares has been found at the kilns, though recognized, sometimes far afield, in collections from occupied sites. Mr. Sumner mentions a few small pieces of this 'red-purple gloss ware' from the sites now described, but the bulk is surprisingly heterogeneous for a manufacturing centre which was presumably supplied for the most part with the local clay. On the other hand, only two fragments of Samian ware are mentioned; and the imitation of certain Samian forms points to a time when the importation of Gaulish pottery was coming to an end. On previous occasions a few coins (A.D. 117–378) have been found, but there is no further assistance from that quarter, and perhaps the best index of date is the series of lip-sections of mortaria. These evidently just preceded the hammer-head type; and if, as the author suggests, the Sloden and Black Heath Meadow kilns are earlier than Crock Hill, Islands Thorns, and Ashley Rails, which represent 'the culmination of prosperous settlement and of pottery production, A.D. 250–350', then the present volume may well picture for us the state of things in the first half of the third century.

Concentric marks on the base of pots at Old Sloden, and there alone in the Forest, were caused by a string of sinew pulled towards the potter in removing the vessel from the turn-table; but this can hardly have been done, as stated, during rotation. Figs. 4–8 on plate iv seem to be urns or vases rather than bowls as described; but the main purpose of the book is to illustrate and explain the kilns, and these were evidently excavated with extreme care in spite of various hindrances. Fragments capable of restoration as well as a type-series of the rest have been generously presented to the British Museum; and it would be a satisfaction to exhibit the Roman pony-shoes from Crock Hill and Ashley Rails, as datable objects of that class are always in demand, but almost unobtainable.

REGINALD A. SMITH.

Periodical Literature

The English Historical Review, April 1921, contains articles on the genealogy of the early West Saxon kings, by Mr. G. H. Wheeler; on the war finances of Henry V and the Duke of Bedford, by Dr. R. A. Newhall, and on the Supercargo in the China Trade about the year 1700, by Dr. H. B. Morse. Among the Notes and Documents are contributions on 'Shire-House', and Castle Yard, by Dr. J. H. Round; on the etymology of 'Bay Salt', by Mr. J. A. Twemlow; on the Escheatries, 1327–41, by Mr. S. T. Gibson; on the House of Commons and St. Stephen's Chapel, by Miss Winifred Jay; on an unpublished

letter from Charles I to the Marquis of Ormonde, by Mr. Goddard H. Orpen; and on Lord Elgin's Report on Levantine affairs and Malta, 28th February 1803, by Dr. J. Holland Rose.

The Numismatic Chronicle, 1920, parts 3 and 4, contains articles on the 'restored' coins of Titus, Domitian, and Nerva, by Mr. H. Mattingley; on the Alexandrian Mint, A.D. 308–312, by Mr. P. H. Webb; on Italian Jettons, by Mr. F. P. Barnard; and on the inscription 'Pereric M' on coins of Matilda, by Mr. G. C. Brooke. The part also contains a general subject-index to volumes 11–20 of the *Chronicle*.

The Transactions of the St. Paul's Ecclesiological Society, vol. 8, part 5, contains the following papers:—Notes on the Zodiacal signs in connexion with the early Service Books of the Church, by Dr. W. de Gray Birch; Ewelme, by Rev. J. A. Dodd, with illustrations of the tomb of Alice, duchess of Suffolk; Church Graffiti, by Mr. R. L. Hine; on the Marian collects of thanksgiving for reconciliation with Rome, by Mr. F. C. Eeles.

The Associated Architectural Societies' Reports and Papers, vol. 35, part 1, contains the following papers:—Pluralism in the Medieval church: with notes on pluralists in the Diocese of Lincoln, 1366, by Mr. Hamilton Thompson; Masons' marks on Worcester Cathedral, by Mr. C. B. Shuttleworth; the date of building the present choir of Worcester Cathedral, by Canon Wilson; some early civic wills of Yorks., by the late Mr. R. B. Cook; old laws affecting trade, by Mr. W. R. Willis; and extracts from the *Curia Regis Rolls* relating to Leicestershire, A.D. 1232–69. There is also a plan of the recently uncovered foundations of the lost church of St. Mary's, Layerthorpe, Yorkshire.

The Transactions of the Exeter Diocesan Architectural and Archaeological Society, 3rd series, vol. 3, part 3, contains a survey of Devonshire churches, by Miss Beatrix Cresswell; illustrated notes on the alabasters from South Hurst Church, by Dr. Philip Nelson and Miss E. K. Prideaux; notes on carved bench-ends in Devon, by Miss K. M. Clarke; and an article on the chalice and paten as illustrated by the church plate of the archdeaconry of Barnstaple, by Rev. J. F. Chanter.

The Transactions of the Historic Society of Lancashire and Cheshire, vol. 71. Included in the volume are a descriptive account of Speke Hall, by Mr. H. Winstanley; a paper on Stanlawe Grange at Aigburth, by Mr. C. R. Hand; a note on a coffer, dated 1678, with the Stanley crest, by Mr. R. T. Bailey; and a paper on the recently discovered plans of old St. Nicholas's Church, Liverpool, by Mr. H. Peet. There are also communications on early plans of Liverpool; on Dame Mary Moore, by Mr. W. F. Irvine; on impressions of armorial seals of Cheshire gentry, made by Elias Ashmole in 1663, by Mr. J. P. Ryland; on Eaton, Cheshire, and Eaton, Bucks, by Mr. R. Stewart Brown; and on two medieval alabasters, by Dr. Philip Nelson.

In the *Transactions of the Lancashire and Cheshire Antiquarian Society*, vol. 37, the Rev. H. A. Hudson describes some old Manchester fonts; Mr. F. H. Cheetham continues his papers on the church bells of Lancashire; Mr. Clayton writes on Richard Wroe, warden of Christ's College, Manchester, from 1684 to 1717/18; Mr. G. R. Axon contributes a note on Gibraltar, a one-time picturesque courtyard in

Manchester; and Mr. J. J. Phelps describes the pre-Norman cross at Cheadle.

Annals of Archaeology and Anthropology, University of Liverpool, vol. 8, no. 1, contains a report on the Oxford excavations in Nubia, 1910–13, by Mr. F. Ll. Griffith; a note on a fibula of Cypriote type from Rhodes, by Professor J. L. Myres: and a paper on Pheidippides; a study of good form in fifth-century Athens, by Dr. W. R. Halliday.

Vol. 8, no. 2, of the same periodical contains the final portion of Dr. Halliday's paper on Pheidippides; a paper by Mr. R. Newstead on the Roman cemetery in the Infirmary field, Chester; and an article by Professor Garstang on the organization of archaeological research in Palestine.

The Transactions of the Leicestershire Archaeological Society, vol. 11, parts 7 and 8, in addition to an obituary notice of the late Mr. Samuel Perkins Pick, contains a paper by Messrs. George Farnham and Hamilton Thompson on the Manors of Allexton, Appleby, and Ashby Folville.

Norfolk Archaeology, vol. 20, part 3, contains a life of Robert Baron, of Norwich, by Mr. F. R. Beecheno, on the Rockland St. Andrew communion cup and the Drayton communion cup, by Mr. J. H. F. Walter; on church plate in the deanery of Blofield, by Rev. E. C. Hopper; and on the Anglo-Danish village community of Martham, by Rev. W. Hudson.

Archaeologia Aeliana, 3rd series, vol. 17, contains a third edition of the catalogue of the inscribed sculptured stones of the Roman era in possession of the Society of Antiquaries of Newcastle-upon-Tyne; Professor Bosanquet contributes an appreciative notice of the late Professor Haverfield; Mr. James Hodgson writes on Thomas Slack, of Newcastle, printer 1723–84, founder of the *Newcastle Chronicle*; and Dr. R. B. Hepple on Uthred of Boldon, a fourteenth-century ecclesiastic and prior of Finchale. The ancestry of John Hodgson Hinde is discussed by Mr. J. C. Hodgson; Mr. Hamilton Thompson gives a summary account of the Clervaux Chartulary with abstracts of the deeds relating to the property of the Clervaux family in the county palatine of Durham; an account of the family of Dagnia, glassmakers, of Newcastle and South Shields, is contributed by Mr. H. M. Wood; Mr. Hunter Blair writes a note upon medieval seals with special reference to those in the Durham Treasury, which serves as an introduction to his catalogue of the Durham seals completed in vol. 16; and Mr. W. H. Knowles publishes an article on the monastery of the Black Friars, Newcastle-upon-Tyne, with a plan and other illustrations.

The Transactions of the Shropshire Archaeological and Natural History Society, 4th series, vol. 7, part 2, contains a continuation of Mr. H. E. Forrest's notes on some old Shropshire houses and their owners; papers on the Manor of Rorrington, by Sir Offley Wakeman; on the institution of Shropshire incumbents; on Kingsland and Shrewsbury show, by Mr. John Barker; on Dame Margaret Eyton's will, 1642, by Mr. Stewart Betton; on an order of the Council of the Marches, July 1571, by Miss Caroline Skeel; on medical men in practice in Shropshire, 1779–83, by Mr. R. R. James; on the sequestra-

tion papers of John Yonge, senior and junior, of Pimley, by Rev. W. G. D. Fletcher; on Sir Thomas Harris, Third Baronet of Boreatton, by the same author; and on Shropshire transcripts at Hereford, by Rev. F. C. Norton.

Vol. 8, part 1, of the same transactions contains articles on the family of Marston of Afcote, by Mrs. Martin; on the medieval hospitals of Bridgnorth, by Prebendary Clark-Maxwell; a deed relating to the hospital of St. John Baptist, Shrewsbury, by Rev. C. H. Drinkwater; further notes on old Shropshire houses, by Mr. Forrest; on Berwick almshouses and the will of Sir Samuel Jones, the founder, by Mr. R. R. James; on the wills of the Prynce family, by Mr. H. E. Forrest; on the glass in St. Mary's, Shrewsbury, by Canon Moriarty; and on Chancery Proceedings, 1697–8, by Rev. W. G. D. Fletcher.

The Proceedings of the Somersetshire Archaeological and Natural History Society, vol. 66, contains, besides notes on churches and other places in the neighbourhood of Bridgwater visited at the Annual Meeting, papers by Mr. Hamilton Thompson, the President of the Society, on Medieval Building Documents; the sixth part of Dr. Fryer's paper on monumental effigies in Somerset, dealing with thirteenth- and fourteenth-century ecclesiastics; on the geography of the Lower Parrett in early times and the position of Cruca, by Mr. Albany Major; on ancient Bridgwater and the River Parrett, by Rev. W. H. P. Greswell; on Bridgwater Wills, 1310–1497, by Mr. Bruce Dilks; on Curci, the family which gave its name to Stoke Curci (Stogursey), by Sir H. Maxwell Lyte; and on the church bells of Somerset, by Mr. H. B. Walters.

The Proceedings of the Suffolk Institute of Archaeology, vol. 17, part 2, contains articles on Suffolk 'Dane Stones' (pre-Conquest carved stones), by Mr. Claude Morley; on the *Nonarum Inquisitiones* for Suffolk, by Rev. W. A. Wickham; on the history of Shrubland, by Hon. Evelyn Wood; on the church of St. Mary the Virgin, Coddenham, by Rev. W. Wyles; and on Needham Market church, by Mr. E. T. Lingwood.

Sussex Record Society, vol. 26, consists of the concluding part, M–Z, of the calendar of Sussex Marriage Licences recorded in the consistory court of the bishop of Chichester for the archdeaconry of Lewes, and in the peculiar court of the archbishop of Canterbury for the deanery of South Malling, 1772–1837.

Yorkshire Archaeological Society, Record Series, vol. 60, consists of an index of wills, administrations, and probate acts in the York Registry, A.D. 1666–72. Vol. 61 is a volume of miscellanea containing documents dealing with the Preceptory of Newland; compositions for not taking knighthood at the coronation of Charles I; a fifteenth-century rental of Nostell priory; a list of benefices in the diocese of York vacant between 1316 and 1319; subscriptions by recusants, 1632–9; Royalist clergy in Yorkshire, 1642–5; presentations to livings in Yorkshire during the Commonwealth; and Extracts from a Yorkshire Assize Roll, 3 Henry III (1219).

The Proceedings of the Society of Antiquaries of Scotland, vol. 54, contains the following articles: The Mint of Crosraguel Abbey, by Dr. George Macdonald; the Hill Fort on the Barmekin of Echt,

Aberdeenshire, by Mr. W. Douglas Simpson ; report on the excavation on Traprain Law in the summer of 1919, by Mr. A. O. Curle ; a hoard of Bronze Age implements found at Cullerne, near Findhorn, Morayshire, by Mr. J. Graham Callander ; recent excavations at Kildrummy Castle, by Mr. W. Douglas Simpson ; silver cup at St. Mary's College, St. Andrews, by Mr. W. W. Watts ; note on a watch signed 'Hieronymus Hamilthon Scotus me fecit 1595', with a view of Edinburgh Castle on the dial, by Sir John Findlay; the Stone Circle at Broomend of Crichie, Aberdeenshire, by Mr. James Ritchie; Prehistoric Argyll—report on the exploration of a burial cairn at Balnabraid, Kintyre, by Mrs. T. L. Galloway ; further Antiquities at Skipness, Argyll, by Mr. Angus Graham ; ancient remains at Birnam, Perthshire, by Mr. T. M'Laren ; further discoveries of Bronze Age urns in hut-circles in the parish of Muirkirk, Ayrshire, by Mr. Archibald Fairbarn ; the accounts of Dr. Alexander Skene, Provost of St. Salvator's College, St. Andrews, relating to the extensive repairs of the college buildings, the church, and the steeple, 1683–90, by Dr. D. Hay Fleming ; and notes on the grave slabs and cross at Keills, Knapdale, Argyll, by Mr. W. C. Crawford.

The Scottish Historical Review, April 1921, contains articles on 'Parliament' and 'General Council', by Professor R. K. Hannay ; on the Stuart papers at Windsor Castle, by Dr. Walter Seton ; on Scottish biblical inscriptions in France, by Mr. W. A. Craigie ; on Ninian Campbell of Kilmacolm, Professor of Eloquence at Saumur, Minister of Kilmacolm and of Rosneath, by Dr. David Murray ; and on Samian ware and the chronology of the Roman occupation, by Mr. S. N. Miller.

Journal of the Royal Society of Antiquaries of Ireland, vol. 50, part 2. Mr. P. J. Lynch contributes topographical notes on the Barony of Coshlea, county Limerick, including Lackelly, the lake district, Cenn Abrat, Claire, Tara Luachra, &c. ; Dom Louis Gougand writes on the earliest Irish representations of the Crucifixion ; Mr. T. J. Westropp describes and discusses the promontory forts and traditions of the districts of Beare and Bantry, county Cork ; Messrs. E. C. R. Armstrong and R. A. S. Macalister describe a wooden book with leaves indented and waxed, found near Springmount Bog, county Antrim ; and Mr. G. H. Orpen continues his study of the earldom of Ulster. Amongst the miscellanea are a description of the seal of Navan, dated 1661 ; the account of the discovery of a crannog in excavating for foundations in the city of Cork ; the description of a Limoges crucifix, probably belonging originally to the preceptory of Mourne ; and the record of the discovery of a limestone arrow-head and of pieces of a gold torc near Newmarket, county Clare.

Archaeologia Cambrensis, vol. 20, parts 3 and 4, contains the presidential address on the classification of camps and earthworks, by Lt.-Col. Morgan, delivered at the Swansea meeting of the Association ; on 'Homo Planus' and leprosy in Wales, a suggested interpretation of the inscription on the Trawsfynydd stone, by Mr. Egerton Phillimore ; notes on objects from an inhabited site on the Worm's Head, Glamorgan, by Mrs. Cunnington ; and on the Welsh monasteries and their claims for doing the education of later medieval Wales, by Mr. Stanley

Knight. The number also contains a report of the annual meeting held at Swansea, with descriptions and several illustrations of the principal places visited.

Y Cymmrodor, vol. 30, consists of the Latin text of the *De Invectionibus* of Giraldus Cambrensis, with a critical introduction by Mr. W. S. Davies.

The Journal of Egyptian Archaeology, vol. 7, parts 1 and 2, April 1921, contains articles on the mural paintings in the city of Akhetaten, by Mr. N. de G. Davies; on the position of women in the ancient Egyptian hierarchy, by Dr. A. M. Blackman; on the Memphite tomb of King Haremhab, by Mr. J. Capart; on a group of hitherto unpublished scarabs in the Metropolitan Museum, New York, by Mr. A. C. Mace; on Egypt and the external world in the time of Akhenaten, by Dr. H. R. Hall; on El-Kab and the Great Wall, by Mr. Somers Clarke; and on Magan, Meluha, and the synchronism between Menes and Naram-Sin, by Dr. W. F. Albright.

The Journal of Hellenic Studies, vol. 40, part 2, contains the following papers: Hera of Kanathos and the Ludovisi throne, by Mr. S. Casson; Telokles and the Athenian Archons of 288/7–262/1 B.C., by Mr. W. W. Tarn; the Financial History of Ancient Chios, by Professor P. Gardner; a staghorn head from Crete, by Mr. E. J. Forsdyke; Agatharcos, by Mr. J. Six; a new portrait of Plato, by Mr. F. Pontsen; Pisidian Wolf-priests, Phrygian Goat-priests, and the Old Ionian Tribes, by Sir W. M. Ramsay; the Aphrodite from Cyrene, by Professor E. A. Gardner; Cornelius Nepos on Marathon, by Mr. M. Cary; and Cleostratus: a postscript, by Professor J. K. Fotheringham.

The Journal of Roman Studies, vol. 9, part 1, contains articles by Professor Bury on Justa Grata Honoria, daughter of Galla Placidia and Constantius III; by Mr. G. McN. Rushforth, on Magister Gregorius de Mirabilibus Urbis Romae: a new description of Rome in the twelfth century, with the Latin text; by Messrs. A. W. Van Buren and R. M. Kennedy, on Varro's aviary at Casinum; by Mr. M. Cary, on a forgotten treaty between Rome and Carthage: an examination of the evidence whether there was a treaty in force at the outbreak of the first Punic War; by Mr. Gilbert Bagnani, on the subterranean basilica at Porta Maggiore; by Professor R. Knox McElderry, on Vespasian's reconstruction of Spain, being addenda to his article in vol. 8; and by Mr. G. H. Stevenson, on Cn. Pompeius Strabo and the Franchise question.

Comptes rendus de l'Académie des Inscriptions et Belles-Lettres, September–October 1920, contains papers by M. Paul Morceaux, on the martyrs of Djemila, recording the discovery of an inscription, probably covering relics; by le Comte Begouen, on a design in relief in the Trois-Frères cave at Umlesquien-Avantès (Ariège); by le Comte Durrieu, on two miniatures in the library at Vienne; by M. Albertini, on the Table of Measures at Djemila, an inscription with a table of measures, erected by the governor Herodes; by Dr. Carton and M. Cagnat, on the excavations at Bulla Regia in 1919–20; by M. Monceaux, on two victims of the Moors at Madauros; by M. E. Cuq, on the Punic city and municipality of Volubilis; by M. Poinssot, on Datus, conductor praediorum regionis Thuggensis; by M. Charles

Fraipont, on the chronology of the Neolithic Age in Belgium; and by Dom Wilmart, on a re-discovered manuscript of Tertullian.

L'Anthropologie, vol. xxx, nos. 3, 4 (December 1920). The opening paper by Dr. R. de St. Périer describes recent finds in a cave at Lespugne, Haute-Garonne. Apart from superficial deposits there were four occupation levels separated by sterile layers—the first three of La Madeleine date, and the lowest as yet discovered containing Solutré types. Besides harpoons (in the two upper strata) there were bone engravings of horses, a quantity of flint implements, bones and shells, and especially some half-cylinders of reindeer-antler, carved in relief with rings and spirals just like those from Lourdes and Arudy, brought together by our Hon. Fellow, M. Léon Coutil, in *Bull. Soc. préh. française*, 1916, 387. The Solutré level is described as late, but produced the early lozenge-shaped blade and some peculiar shouldered points with concave bases, confined to the Pyrenees and Cantabria, and considered a primitive form of the *pointe-à-cran*. The discovery has an important bearing on the origin and spread of the Solutré culture in the West.

M. Louis Siret, in a paper on the Lady of the Maple, happens to touch on a point raised in our April number; and, accepting the modern view that Druidism was of neolithic origin, contends that it came from the east by way of Spain. In former papers, referred to in *Proc. Soc. Antiq.* xxxi, 152, M. Siret based the neolithic art of western Europe on the palm-tree and the cuttle-fish, and now explains many of the symbols and carvings of that period by the cult of the maple, or tree-goddess who cared for the dead. The rock-markings of Gavr'inis and New Grange are compared with and derived from the patterns on the maple-bark (especially the sycamore, *Acer pseudo-platanus*), and natural scars on the bark are said to have suggested the female figure of the French menhirs and dolmens. The Druids were also tree-worshippers, preferring the oak, and the author follows M. Salomon Reinach in attributing to them the construction of the dolmens; but the connexion suggested between gathering the mistletoe and fertilizing the date-palm is far-fetched and unnecessary.

Dr. Verneau's article on the early ethnography of Mauretania gives a useful summary of the arrow-heads, celts, and other stone implements of the western Sahara, including a grooved stone used for smoothing the shafts of arrows, as in the late neolithic or Copper Age of Europe.

Revue Archéologique, 5th series, vol. 13, January–March 1921, contains the following papers: Irish miniatures with iconographic subjects, by M. Jean Ebersolt; a new aryballos in the Louvre, by Mr. Friis Johansen and M. E. Potier; texts and scholia of the *Odyssey*, by M. Victor Bérard; the bas-reliefs at Marquinez (Alava), by the Abbé Breuil; engravings in the cavern of Isturitz, by M. E. Passemard; the lead trade in the Roman period (continuation), by M. Mauria Besnier; our ancient cathedrals and the masters of the works (continuation), by M. F. de Mély; Thracian archaeology (continuation), by M. G. Seure; the working of iron ore in Gallo-Roman times, by M. Henri Corot; Prometheus, by M. Louis Siret; and a note on terra-cotta statues, by M. W. Deonna.

Bulletin Monumental, vol. 79, parts 3, 4, contains the following articles:

the abbey church of Mouzon, by Colonel Victor Donau; the church at Creil, by M. E. Lefèvre-Pontalis; the church at Semur-en-Brionnais, by M. André Rhein; the basilica of St. Front at Périgueux, by the Marquis de Fayolle; the château of Sagonne, by M. Deshoulières; a twelfth-century house at Chartres, by M. A. Mayeux; Carolingian stones in the tower of La Charité-sur-Loire, by M. Paul Deschamps; the church at Puiseaux. by M. H. Deneux; the legend of Hugh Lallement, sculptor of Châlons, by M. F. de Montremy; and the stalls at St. Benoît-sur-Loire, by Mme J. Banchereau.

Bulletin de la Société belge de Géologie, &c. xxx. (1920): *Sur la découverte de deux squelettes d'hommes flénusiens à Spiennes*, par A. Rutot. In four pages M. Rutot records the discovery of two complete human skeletons, and reconstructs a tragedy. On a shelf in the chalk cliff a primitive miner, with a pike beside him for food, had been occupied in extracting flint nodules, and was resting on the spot when he was overwhelmed by a loosened mass of chalk. His companion went to his assistance, and had bored a tunnel in the heap when a second fall occurred, and a large stone crushed the rescuer's skull. This method of procuring raw material is taken to be earlier than mining, the normal system at Spiennes; and the absence of polished or chipped flint or even deer-antler picks being evidence against a late or early Spiennes date, the only course is to refer the skeletons to the period of Le Flénu, when absolute barbarians invaded Belgium and drove out the culture of Tardenois. It will be confessed that the interpretation of the find is open to criticism, but the necessary details have been noted; and the skeletons, which are in perfect order and show small but long skulls, depressed foreheads, and a certain prognathism, have been carefully preserved at the Royal Museum of Natural History, Brussels.

Académie royale de Belgique—Classe des Sciences, Bulletin 1920, pp. 456–71. *Sur la faune des Mammifères de l'époque de la Pierre polie en Belgique*, par A. Rutot. Excavations since the armistice at Spiennes, especially in the camp at Cayaux, have yielded bones of animals used for food by the flint-miners of the neighbourhood; but among them were also remains of the grizzly bear and the reindeer. The former is generally supposed to have left western Europe at the close of the Pleistocene, after being in evidence from Le Moustier times; but the author would explain the reindeer by the disturbance of quaternary loam by the mine-shafts. The occurrence of the Persian wild goat (*Capra aegagrus*) is also a surprise; and it is pointed out that the presence of sheep does not imply that domestication had begun. It occurs in Belgium during the Mas d'Azil period, and, indeed, goes back to that of Le Moustier in the cave called Trou de la Naulette, to the middle Aurignac period in the Spy cavern, and to upper La Madeleine in the Trou de Chaleux. The tendency in England is to explain such occurrences in Pleistocene deposits by faulty excavation, but *all* excavators are not bad observers.

The elk is another unexpected item, but it flourished in Belgium during the cave period, and survived in central Europe from the neolithic to the middle ages. On the other hand, the dog and horse are absentees, the former having, however, been found with one of the

flint-miners at Strépy, but the horse is unknown in Belgium during the neolithic, though abundant before and after. Déchelette pointed out that the horse is barely represented in the lake-villages of upper Austria, and that it must have been domesticated long after the dog; but M. Rutot challenges his conclusion, and contends that the idea of domesticating animals came from the East, as did also, about the same time, the systematic cultivation of wheat and the manufacture of ribbon-ware (*céramique à bandes, Bandkeramik*). A list of animals found in peat is also given, and the deposit is said to have begun about the middle of the neolithic, a little before the time of polished stone, and to have continued till the third century of our era; hence finds in the turbaries are of little chronological value.

Fornvännen: Meddelanden från K. Vitterhets Historie och Antiquitets Akademien, 1920, Häft 4 (Stockholm). An article on medieval Alvastra, by Otto Frödin, contains an illustration of a reconstructed Viking tomb with the upright stones engraved in the Ringerike style and much resembling a slab in the British Museum, perhaps from St. Paul's Churchyard. It dates from the first half of the eleventh century and shows the original use of a shaped slab found below the Sverkersgården stone building at Alvastra. Prehistoric conditions in the Baltic are discussed by Gunnar Ekholm, who gives a map showing the connexion between north-east Germany and Sweden in the Bronze Age, East Russian products in the north, and a Swedish type of bronze socketed celt in Finland and East Russia. In the Cist period the pottery characteristic of the megalithic graves disappears, and gives place to the single-grave ware with cord-pattern decoration. In a sense the latter culture was indigenous, being directly descended from the burials connected with the early habitation sites (*Boplatsgraven*) of Scandinavia; and megalithic tombs and pottery were due to an intrusion from oriental lands viâ Western Europe—a splendid interlude in Northern prehistory. Towards the end of the Stone Age, however, the spiral found its way to Scandinavia across Eastern Europe, and this became the ordinary route in the Bronze Age, to the exclusion of western influences. The culture distinguished by the boat-shaped axe and associated pottery seems to be earlier in Finland than in Sweden, and both countries probably derived it from Central Europe. Single-graves in the Elbe-Saale district, for instance, normally contain the so-called faceted axe-hammer and cord-pattern pottery; and beads and carvings in amber, as well as the pottery, show a lively intercourse between East Prussia and the interior of Russia towards the end of the neolithic period. To define the spheres of influence and to date the various lines of communication is an archaeological achievement that considerably helps towards a correct interpretation of prehistoric finds in Europe.

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Architecture.

Notre-Dame de Paris, sa place dans l'architecture du XIIᵉ au XIVᵉ siècle. Par Marcel Aubert. $9\frac{1}{2} \times 7\frac{1}{2}$. Pp. 227, with 50 illustrations and plan in colours. Paris: Henri Laurens. 40 francs.

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*F. Haverfield, 1860–1919. By George Macdonald. $9\frac{3}{4} \times 6$. Pp. 17. Milford, for the British Academy. 2*s*.

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*A descriptive account of Roman Pottery sites at Sloden and Black Heath Meadow, Linwood, New Forest, with plans of the kilns and illustrations of the ware. By Heywood Sumner, F.S.A. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 45. London: Chiswick Press. 3*s*. 6*d*.

Egyptology.

*Prehistoric Egypt illustrated by over 1,000 objects in University College, London. By W. M. Flinders Petrie. $12 \times 9\frac{3}{4}$. Pp. viii + 54, with 53 plates. London: British School of Archaeology in Egypt. 1920.

See also Textiles.

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See also Egyptology.

Textiles.

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Proceedings of the Society of Antiquaries

Thursday, 17th March 1921. Sir Hercules Read, President, in the Chair.

Mr. Charles Igglesden and Mr. Eric George Millar were admitted Fellows.

Dr. W. L. Hildburgh, F.S.A., read papers on bronze polycandela found in Spain; on some examples of medieval Catalan embossed sheet metal work, both of which will be printed in the *Antiquaries Journal*; and on some Spanish champlevé enamels, which will be printed in *Archaeologia.*

Thursday, 24th March 1921. Mr. C. L. Kingsford, Vice-President, in the Chair.

A special vote of thanks was passed to Mr. Maurice Rosenheim, F.S.A., for his gift of a seventeenth-century English heraldic MS.

Mr. Pretor Whitty Chandler was admitted a Fellow.

The Report of the Auditors of the Society's accounts for 1920 was read, and thanks were returned to the auditors for their trouble and to the Treasurer for his good and faithful services.

Mr. A. W. Clapham, F.S.A., read a paper on the Priory and 'Manor' of Dartford, which will be printed in the *Antiquaries Journal.*

Thursday, 14th April 1921. Sir Hercules Read, President, in the Chair.

Mr. C. L. Kingsford, Vice-President, read a paper on some London houses of the Tudor period, which will be printed in *Archaeologia.*

Thursday, 21st April 1921 at 5 p.m. Sir Hercules Read, President, in the Chair.

The Rev. Francis Neville Davis was admitted a Fellow.

Mr. C. R. Peers, Secretary, read a paper on two relic-holders from altars in Rievaulx Abbey, which will be printed in the *Antiquaries Journal.*

Mr. E. A. Rawlence, F.S.A., exhibited the original plan on vellum made by Robert Adams, of the Defences of the Thames in 1588, showing the position of the two booms, of the forts on the river bank, and the route of Queen Elizabeth's progress from Greenwich to the camp at Tilbury.

Thursday, 28th April 1921. Anniversary Meeting. Sir Hercules Read, President, in the Chair.

Mr. E. Neil Baynes and Major W. J. Freer were appointed scrutators of the ballot.

Mr. Arthur Edwin Preston was admitted a Fellow.

The following report of the Council for the year 1920–1 was read :—

The year that has passed has been in many ways a critical one in the history of the Society. The special Committee which was appointed to consider the financial position reported in May, and its recommendations, so far as they are concerned with finance, have been fully dealt with by the Treasurer.

The appointment of this Committee was considered to give a good opportunity for taking in hand a matter which had been long in contemplation, namely, the thorough revision of the statutes. The Committee's recommendations were approved by Council and brought before a special meeting of the Fellows in December, when they were carried with certain amendments and omissions. The general effect of the revision is to simplify procedure and to abolish much that had become obsolete. An important provision is that increasing the subscription to new Fellows to £4 4*s.* per annum, and introducing a sliding scale for composition fees, of which advantage has already been taken in a few instances.

Two other events of considerable importance in the history of the Society have occurred during the past year. The passing of the Sex Disqualification (Removal) Act made it for the first time possible to elect women to the fellowship of the Society. The Council nominated, *honoris causa*, four ladies, who were duly elected and have already taken part in our proceedings.

The second event was the replacement of the annual volume of *Proceedings* by a quarterly publication to be known as the *Antiquaries Journal*. Two parts have already been published, and the *Journal* has received a warm welcome from the public press and from antiquaries generally. Although it is too early as yet to be able to state the amount of outside support which it will receive, the sales of the first number were very encouraging and there is every reason to hope that it may prove a financial success as well as supply an undoubted want in archaeological literature.

The Library Committee has met regularly and, in addition to its ordinary duty of recommending books for purchase, has adopted a method which it is hoped will simplify the registration of books in circulation from the library. It has also been carefully through the lists of periodicals received by exchange or purchase, and has been enabled to make good many gaps in our series, due in great measure to the willing co-operation of the societies whose publications we receive.

In the matter of Research Colonel Hawley continued his excavations at Stonehenge throughout the year, and the report on his first season's work was printed in the first number of the *Journal*. The Office of Works has decided not to proceed with its task of securing the stones during the coming season, but Colonel Hawley has been empowered to continue his excavations of the 'Aubrey' holes and the

ditch, and has already been at work for some time. It is hoped that his second report will be presented to the Fellows at the last meeting of the session.

In accordance with a recommendation of the Research Committee it was decided that no attempt should be made, at least for the present, to continue the excavations at Old Sarum or at Wroxeter, partly owing to the unlikelihood of sufficient funds being raised and partly in deference to local opinion. The Shropshire Archaeological Society has accordingly resumed its tenancy of the site of the 1859 excavations at Wroxeter and has taken over all the Society's liabilities under this head.

Grants have been made from the Research Fund in aid of the excavations at Ilkley, Ospringe, Segontium, Wayland's Smithy, and St. Augustine's, Canterbury.

In the place of Mr. Clinch, whose sudden and unexpected death is greatly deplored by the Council, Mr. A. E. Steel has been appointed Clerk to the Society. Mr. Steel has been in the Society's service for nearly seventeen years and may confidently be expected to carry out his new duties to the entire satisfaction of the Officers and Fellows.

The Council cannot close this part of its report without expressing its great regret that Sir Edward Brabrook has desired not to be nominated for re-election as Director at the Anniversary. He has held this office for upwards of ten years, and may naturally claim that he has earned his retirement. In acceding to his request the Council desires to express the hope that he may be long spared to adorn his new dignity of 'Father' of the Society.

The losses by death during the past year have been about the average, but the Council greatly regrets to note that the number of resignations has again increased considerably.

The following have died since the last Anniversary:—

Ordinary Fellows.

Rev. Prebendary Thomas Auden, 11th November 1920.
Sir Herbert Barnard, Knt., 30th June 1920.
Robert Birkbeck, 18th November 1920.
Edward Thomas Clark, January 1921.
Samuel Pepys Cockerell, 12th March 1921.
Oliver Codrington, M.D., 3rd January 1921.
Colonel Sir James Gildea, G.B.E., C.B., 6th November 1920.
Thomas Tylston Greg, M.A., 18th September 1920.
Alfred Edmund Hudd, 7th October 1920.
William Thomas Lancaster, 13th November 1920.
Charles Lynam, Hon. F.R.I.B.A., 21st February 1921.
Rev. Walter Marshall, 6th March 1921.
Rev. Robert Scott Mylne, M.A., B.C.L., 23rd November 1920.
George Payne, 29th September 1920.
Edward Shearme, 11th September 1920.
Rt. Reverend Thomas Stevens, D.D., 22nd August 1920.
Sir Arthur Vicars, K.C.V.O., 14th April 1921.

Honorary Fellow.

Le Comte Robert de Lasteyrie, 29th January 1921.

The Rev. Thomas Auden, Prebendary of Lichfield, who died at the age of 84, was ordained in 1859, and after spending ten years as a schoolmaster, became successively incumbent of Ford, St. Julian, Shrewsbury, and Condover. He took an active interest in local affairs and had been chairman of the Atcham Board of Guardians and Vice-Chairman of the Shropshire Education Committee.

All his life he was a keen archaeologist and was one of the original members of the Shropshire Archaeological Society, of which he was Chairman of Council. He had a great gift for popularizing any study which he took up, and his books, among which may be mentioned his *History of Shrewsbury*, were models of clear, well-balanced English. He had for many years urged the excavation of the site of Viroconium, and when at last it was possible for the Society of Antiquaries to begin the work, he threw himself into the organization with characteristic energy, being a regular attendant at the meetings of the Research Committee in London, acting as chairman of the local committee, and doing much to stimulate local interest and to raise the necessary subscriptions.

Sir Herbert Barnard was born in 1831 and elected a Fellow in 1855. By profession a banker, he had taken a prominent part in public affairs and from 1884 to 1908 was chairman of the Public Works Loan Commission. He was knighted in 1898.

He seems to have taken no part in the work of the Society, nor to have contributed to its proceedings, but in 1913 he succeeded Sir Charles Robinson as 'Father' of the Society, and on his death had been a Fellow for nearly sixty-five years, a period which appears to have been only twice exceeded in the Society's history.

Mr. Samuel Pepys Cockerell, who had been a Fellow since 1904, was a well-known and popular figure at the meetings of the Society. Related to at least two eminent architects and artists, he was himself an artist of distinction, and had travelled much abroad in pursuit of his profession. A descendant of Samuel Pepys, the diarist, it was only proper that he should have been President of the Pepys Club, a position which he was holding at his death. He served on the Council in 1912 and 1913.

Dr. Oliver Codrington was best known as a numismatist, having been for many years one of the Secretaries of the Royal Numismatic Society, to whose chronicle he made several important communications. Beyond exhibiting a glazed tile of unusual form before the Society in 1905, he does not appear to have taken any active part in our proceedings.

Sir James Gildea was born in Ireland in 1838 and was educated at St. Columba's College, Dublin, and Pembroke College, Cambridge. He served in the Franco-Prussian War on behalf of the National Society for Aid to the Sick and Wounded, and after the Zulu and Afghan wars raised large sums of money for the relief of the dependants of those killed or wounded in those campaigns. In 1885 he founded the Soldiers' and Sailors' Families Association, of which he

remained until his death chairman, treasurer, and one of the trustees. He also founded the Royal Homes for Officers' Widows and Daughters, and from 1890 to 1895 was organizing secretary of Queen Victoria's Jubilee Institute for Nurses.

Mr. Alfred Edmund Hudd was well known to the Fellows for the prominent part which he took in the work of excavating Caerwent, for many years acting as treasurer of the excavation fund and giving much assistance in the superintendence of the excavations. He also took a considerable share in the preparation of the excavation reports and made several other contributions to our *Proceedings.*

He had a thorough knowledge of the archaeology of Bristol and its neighbourhood and was founder of the Clifton Antiquarian Club, which did much valuable work during the twenty-seven years of its existence. On its dissolution in 1912 the balance of its funds were at Mr. Hudd's suggestion handed over to the Society's Research Fund. He was also an original member of the Bristol and Gloucestershire Archaeological Society, of which he was a Vice-President and member of Council. He died at his house at Clifton on 7th October at the age of 74.

Mr. William Thomas Lancaster had taken little actual part in the affairs of the Society, but he was a prominent member of the Yorkshire Archaeological Society, of which he was honorary librarian and to whose transactions he had made many important contributions. His interest in that society is evident from the fact that he left it a valuable bequest in his will.

Mr. Charles Lynam, who died on 21st February, at the advanced age of 92, had filled a prominent place in the municipal life of the Potteries, having been Borough Surveyor of Stoke and subsequently member of the Council, Alderman, and Mayor, and he was held in great esteem by his fellow-townsmen. He was educated at Christ's Hospital, and took up architecture as a profession, practising in his native town, where he soon was employed on many public and private works. He was an Honorary Fellow of the Royal Institute of British Architects.

He did much archaeological work during his long life, his most important undertaking being probably his excavation of Croxden Abbey, on which he published a well-illustrated monograph. He only made one contribution to the Society's *Proceedings,* but for many years had served as Local Secretary for Staffordshire, and was a frequent visitor to the Library until advancing years made it difficult for him to come to London.

An obituary notice of *Mr. Geroge Payne,* who was prominent as the founder of the Museum at Rochester and had done much archaeological work in Kent, has already appeared in the *Journal* (p. 78).

Bishop Thomas Stevens died in August at the age of seventy-two, but a few months after he had resigned the suffragan bishopric of Barking. Educated at Shrewsbury and Magdalene College, Cambridge, he was ordained in 1865 and spent the greater part of his life working in the East End of London or in London-over-the-Border,

He was consecrated Bishop of Barking, then a suffragan of St. Albans, but later of Chelmsford, in 1901, having previously been appointed Archdeacon of Essex, which position he continued to hold after his consecration. He was elected a Fellow of the Society in 1889, but never found the opportunity of taking any part in its affairs, although he was an active member of the Essex Archaeological Society, of which he had been President.

Sir Arthur Vicars died under tragic circumstances on 14th April, his house being set on fire and completely destroyed.

He was born in 1864 and educated at Magdalen College School and Bromsgrove. In 1893 he was appointed Ulster King-of-Arms in succession to Sir Bernard Burke, and held that position until 1907, when he was relieved of his office under circumstances which have never yet been satisfactorily explained. As Ulster he showed much energy and initiative. He founded the heraldic museum in Dublin Castle, and the offices of Dublin and Cork Herald were revived at his instance. The ceremonial for the State Visits of Queen Victoria and King Edward was largely under his direction. He was knighted in 1896 and made a K.C.V.O. in 1903. On ceasing to be Ulster he retired to his home in County Kerry. He appears never to have taken any active part in the affairs of this Society, but he was a trustee of the National Library of Ireland and had formed a large collection of book-plates, which it is to be feared was destroyed with the other contents of his house.

An obituary notice of *Le Comte Robert de Lasteyrie*, who died on 29th January, appears on p. 242 of this number of the *Journal*.

An obituary notice of *Dr. Robert Munro* has already appeared in the *Journal* (p. 76). He was never a Fellow of the Society, but for many years was a Local Secretary for Scotland, and was one of the most prominent of Scottish archaeologists.

Although the Fellows have already had the opportunity of expressing their regret at the death of *Mr. George Clinch*, an obituary notice of whom appeared in the April number of the *Journal* (p. 145), the Council cannot allow this report to be submitted without once again expressing its great regret at the death of one who for twenty-five years had been the loyal servant of the Society.

The Treasurer made a statement on the general state of the Society's finances and presented his accounts.

The scrutators having handed in their report the following were declared elected as Officers and Council for the ensuing year: Sir Hercules Read, *President*; Mr. William Minet, *Treasurer*; Mr. C. R. Peers, *Director*; Mr. Ralph Griffin, *Secretary*; Lord Carmichael, Sir Martin Conway, Mr. O. M. Dalton, Rev. E. E. Dorling, Sir Vincent Evans, Archdeacon Gibbs, Mr. A. F. Hill, Mr. C. H. Jenkinson, Sir Matthew Joyce, Colonel J. B. P. Karslake, Mr. C. L. Kingsford, Lord Northbourne, Mr. H. W. Sandars, Mr. C. O. Skilbeck, Major Harley Thomas, Mr. Edward Warren, and Sir Lawrence Weaver.

The meeting then adjourned until 8.30, when the President delivered

his Anniversary address (p. 167), at the close of which the following resolution was proposed by Mr. C. L. Kingsford, V.P., seconded by Mr. L. L. Duncan, and carried unanimously:

'That the best thanks of the meeting be returned to the President for his address and that he be requested to allow it to be printed.'

The President signified his assent.

Thursday, 12th May 1921. Sir Hercules Read, President, in the Chair.

Mr. Bryan Thomas Harland was admitted a Fellow.

Mr. H. H. King exhibited a twelfth-century ivory carving recently discovered at St. Albans.

Captain J. E. Acland, F.S.A., exhibited some Roman spoons discovered at Somerleigh Court, Dorchester.

Major C. A. Markham, F.S.A., exhibited a late sixteenth-century helmet from Braybrooke Church, Northants.

The above papers will be published in the *Antiquaries Journal.*

Mr. R. W. Crowther exhibited the seventeenth-century communion plate belonging to Hare Court church, Canonbury.